APPENDIX C

CALIBRATION CERTIFICATES

SOLUTIONS

PROCESS 1.18B 09-23-1996 09:40:27 Sugar Land

PANEX CALIBRATION CERTIFICATE

Model 1100 Cal. Run # F81

Serial # R2-1207

L.B.# N/A

Cell # M903H

Full Scale 10000 psia 68966 kpa

Temperature range 20 Deg C to 82 Deg C
Temperature range 68 Deg F to 180 Deg F

Date Calibrated 09-21-1996 Location: Sugar Land

C0	C1	C2	C3	C4
0.0	-4275.16	17594	109009	-8590
C5	C51	C52	C53	
-65.7868	.614347	-10.7913	77.2456	
C6	C61	C62	C63	
-82.7826	.122734	41.2384	-799.261	
C7	C71	C72	C73	C74
2.0148	-2.09036	276.111	-4623.7	21.943
C8				
-.001468				
C9				
9				

The above listed equipment was manufactured, assembled, and tested in compliance with Panex engineering specifications and applicable industry standards.
All calibrations are performed in a controlled environment, using instrumentation and methods which assure that the specifications claimed are reliable.

Manny Medina
Certifying Technician

Q.A. APPROVED 23-SEP-96
Date

Certifying QA Inspector

PANEX CORPORATION

TRANSCAT®

CalXpress® Only at TRANSCAT

CALIBRATION LAB

Certificate of Calibration

TRANSCAT will maintain and document the traceability of all its standards to the National Institute of Standards and Technology, NIST (formerly NBS), or the National Research Council, NRC, of Canada, or to other recognized national or international standard bodies, or to measurable conditions created in our laboratory using established physical constants and/or natural physical phenomena, and recognized procedures. The TRANSCAT calibrations system, when applicable, conforms to the requirements of MIL-STD-45662A.

Complete records of work performed are maintained by TRANSCAT and are available for inspection. Laboratory assets used in the performance of this calibration are shown below the certified instrument description.

TEMPERATURE : 70 °F

RELATIVE HUMIDITY OF: 46 %

Customer : HOECHST CELANESE
Manufacturer : EATON CORPORATION
Model Number : UPC5000BACB
Serial Number : A1258
Description : PRESSURE CALIBRATOR
Calibrated : 12/4/96 PO# : 3317400
Date Due : 12/4/97
RA# : 5-L2292-1-1
ID No. : 00008
ITEM RECEIVED WITH OPERATIONAL FAILURE

(Customer Use Only) **NOTES:**

ASSETS	MANUFACTURER	MODEL#	DESCRIPTION	CALIBRATED	DATE DUE
5019	FLUKE	5700A	CALIBRATOR	9/9/96	9/9/97
5020	AMETEK	RK-300	DEAD WEIGHT TESTER	6/15/96	6/15/97
5032	AMETEK	T-150	DEAD WEIGHT TESTER	5/20/96	5/20/97
5061	RUSKA	6222	PRESSURE CALIBRATOR	7/8/96	7/8/97

Calibrated at :

1181 Brittmore Suite 600
Houston, TX 77043, USA
800-828-1470 FAX# 800-395-0543
By: Keith Kucera

K Kucera EA

E. SUAREZ
LAB MANAGER

F0013R2 1/25/95

TRANSCAT CALIBRATION LAB DATA

CalXpress. Only at TRANSCAT

RA# : 5-L2292-1-1
Description : PRESSURE CALIBRATOR
Customer : HOECHST CELANESE
Calibrated : 12/4/96 Service : P6
Date Due : 12/4/97

Mfg : EATON CORPORATION
Model : UPC5000BACB
Serial : A1258
PO# : 3317400
Customer ID# : 00008
Verification Procedure : D1878R1

INPUT		I/O ACCURACY	LOW / HIGH LIMITS			As Rec'd	As Shipped
RANGE: 400	**psi**						
0.0	psi	±0.05% of Full Scale	-0.2	0.2	psi	OpFail	0.0
80.0	psi	±0.05% of Full Scale	79.8	80.2	psi	OpFail	79.9
160.0	psi	±0.05% of Full Scale	159.8	160.2	psi	OpFail	159.9
200.0	psi	±0.05% of Full Scale	199.8	200.2	psi	OpFail	199.9
320.0	psi	±0.05% of Full Scale	319.8	320.2	psi	OpFail	319.9
400.0	psi	±0.05% of Full Scale	399.8	400.2	psi	OpFail	399.8
RANGE: 1000	**psi**						
0.0	psi	±0.05% of Full Scale	-0.5	0.5	psi	OpFail	0.0
200.0	psi	±0.05% of Full Scale	199.5	200.5	psi	OpFail	200.0
400.0	psi	±0.05% of Full Scale	399.5	400.5	psi	OpFail	399.5
500.0	psi	±0.05% of Full Scale	499.5	500.5	psi	OpFail	499.5
800.0	psi	±0.05% of Full Scale	799.5	800.5	psi	OpFail	799.5
1000.0	psi	±0.05% of Full Scale	999.5	1000.5	psi	OpFail	999.5
RANGE: 2000	**psi**						
0.0	psi	±0.05% of Full Scale	-1.0	1.0	psi	OpFail	0.0
400.0	psi	±0.05% of Full Scale	399.0	401.0	psi	OpFail	399.5
800.0	psi	±0.05% of Full Scale	799.0	801.0	psi	OpFail	799.5
1000.0	psi	±0.05% of Full Scale	999.0	1001.0	psi	OpFail	999.5
1600.0	psi	±0.05% of Full Scale	1599.0	1601.0	psi	OpFail	1599.5
2000.0	psi	±0.05% of Full Scale	1999.0	2001.0	psi	OpFail	1999.5

TRANSCAT CALIBRATION LAB DATA

CalXpress Only at TRANSCAT

RA# : 5-L2292-1-1	Mfg : EATON CORPORATION
Description : PRESSURE CALIBRATOR	Model : UPC5000BACB
	Serial : A1258
Customer : HOECHST CELANESE	PO# : 3317400
Calibrated : 12/4/96 Service : P6	Customer ID# : 00008
Date Due : 12/4/97	Verification Procedure : D1878R1

INPUT		I/O ACCURACY	LOW / HIGH LIMITS			As Rec'd	As Shipped
RANGE: 20	mA						
4.000	mA	±0.05% of Full Scale	3.990	4.010	mA	OpFail	3.998
8.000	mA	±0.05% of Full Scale	7.990	8.010	mA	OpFail	7.996
12.000	mA	±0.05% of Full Scale	11.990	12.010	mA	OpFail	11.994
16.000	mA	±0.05% of Full Scale	15.990	16.010	mA	OpFail	15.993
20.000	mA	±0.05% of Full Scale	19.990	20.010	mA	OpFail	19.991
RANGE: AMBIENT	psi						
ACTUAL	psi	±0.05% of Full Scale	-.2	.2	psi	OpFail	-.2

Remarks: PROCEDURE: MANUFACTURER'S PROCEDURE
REPLACED THE MANAFOLD ASSEMBLY AND ALSO CLEANED THE PLUMBING SYSTEM WHICH WAS SEVERELY CONTAMINATED.
ADJUSTED TO MANUFACTURER'S SPECS AFTER THE UNIT WAS REPAIRED.

Transcat Recall Verification System CalXpress

Please review the information listed below and indicate any changes on the line provided and fill in any missing information. Please fax this information to 1-800-395-0543. This information will be used to update our recall notification files.

Customer : HOECHST CELANESE
Address1 : FM 3057
Address2 :
City : BAY CITY
State/Prov : TX
Zip/P.C.: 77414
Contact : ROLAND SILVAS
Phone : 409-241-4019
Fax:

Customer: _____
Address: _____
_____
City: _____
State/Province: _____
Zip/P.C.: _____
Contact: _____
Title: _____
Phone: _____
Fax: _____

Person Responsible for Test and Measurement Equipment Specifications:

Name: _____
Title: _____
Phone: _____

Recalibration Contact for this unit if different from above:

Name: _____
Title: _____
Phone: _____

Manu :	EATON CORPORATION	Serial :	A1258
Model :	UPC5000BACB	RA # :	5-L2292-1-1
Description :	PRESSURE CALIBRATOR	ID # :	00008
		PO # :	3317400

As part of our Quality Review and improvement system, we would like you to review our performance on the order and unit listed above and the service you received from Transcat.

	Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree
The information on the certificate is accurate and complete.	5	4	3	2	1
The unit was returned to you clean and in excellent working order.	5	4	3	2	1
The lab performed all the work you expected.	5	4	3	2	1
The turn-around time met your needs.	5	4	3	2	1
Communications with the lab were clear, concise, timely and effective.	5	4	3	2	1

Please identify any other areas that we should be addressing that will further Transcat's relations with you:

_____
_____

Fax: 1-800-395-0543 **ATTN: National Lab Manager**

APPENDIX D

FALLOFF PLOTS

Section 1, Page 1 - WELL TEST INTERPRETATION
Section 1, Page 2 - SEQUENCE OF EVENTS
Section 2, Page 1 - BOTTOMHOLE PRESSURE AND TEMPERATURE LOG
Section 3, Page 1 - LOG-LOG MATCH
Section 3, Page 2 - SUPERPOSITION
Section 3, Page 3 - PRESSURE HISTORY SIMULATION
Section 3, Page 4 - SUPERPOSITION SIMULATION
Section 3, Page 5 - INPUT DATA - LOG-LOG ANALYSIS
Section 3, Page 6 - INPUT DATA - SUPERPOSITION ANALYSIS

SOLUTIONS, INC.

SOLUTIONS, INC.

Well Test Interpretation

for

Hoechst Celanese Chemical Ltd.

WDW 110 (Well #1-A) - BHP Falloff Test

Bay City, Texas

Report Number
970207-001

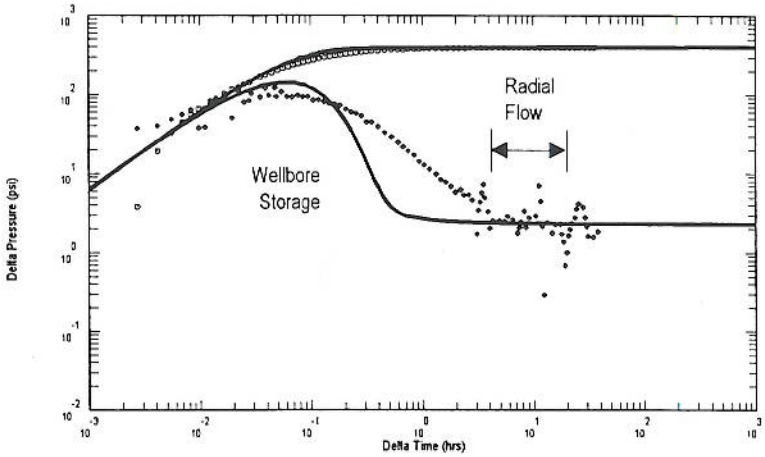
Test Date
Jan-21-97

Interpretation Results

Model of Behavior	Homogeneous
Permeability (to Waste).....	850 md
Transmissibility	197,535 md-ft/cp
Skin	68
Delta P Skin (psi)	350
Pi (at 3300 ft)	1493 psia
Total Delta P (Pwf - Pi)	(1895 - 1493) = 402
Last SI Pressure (psia)	1498.94
Radius of Investigation	4895 ft
Percent of Delta P Skin	87%

Input Data: Qlast = -7097 bpd, B = 1.006 rbl/stb
rw =0.30, h = 165, u = 0.71, ct = 6.00E-6, phi = 0.33

Figure A - Log-log Plot of Falloff Period



Executive Summary

Test Overview

This report contains the interpretation of a falloff test on the Hoechst Celanese Chemical Co. WDW 110 (Well #1-A). The gauge was placed at a depth of 3300 feet. Flowing pressures were monitored for a short period of time and the well was shut-in at surface for a 38- hour falloff test. The final rate prior to shut-in is 7097 bpd (207 gpm). Section 2 provides a detailed listing of the rate history used in the analysis.

Interpretation Results

Figure A, above, is a log-log plot of the build-up period with the pressure derivative function. The solid line in Figure A is the multi-rate type-curve response generated using a wellbore storage and skin model. There is good agreement between the measured data and model response. Superposition and Pressure History Simulation analysis also provide results consistent with the log-log analysis presented above. Based on the model response radial flow occurs from 4 to 18 hours into the falloff.

Skin Damage

The estimated skin damage (68) represents 87% of the total pressure drop required to inject 7097 bpd (207 gpm) into the formation. The pressure drop due to skin is 350 psi.

Boundaries

There are no boundaries observed during the falloff period. The calculated radius of investigation based on the total compressibility, mobility (k/u), and porosity, indicated above is 4895 ft at the end of the falloff period.

Report Contents

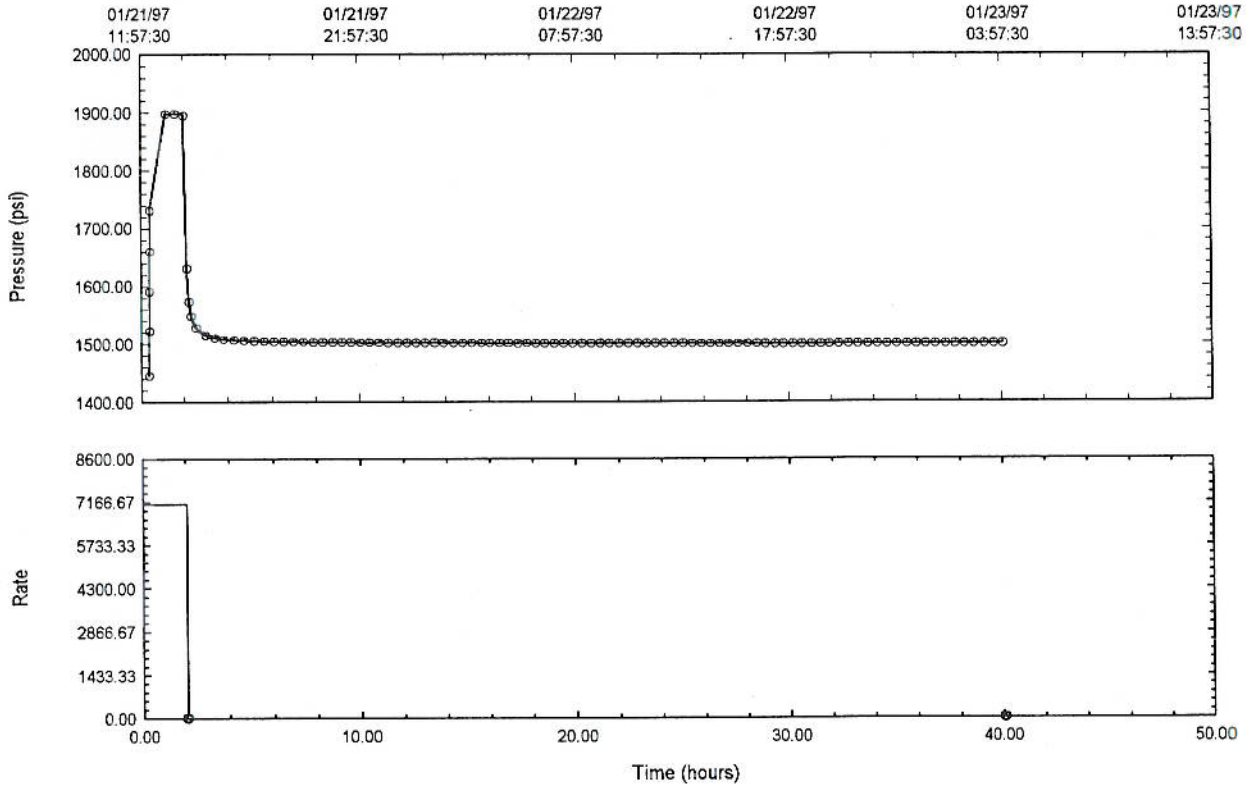
Section 2 - Sequence of Events; Section 3 - Analysis Plots; Section 4 - Pressure Data; Section 5 - Completion Data; Section 6 - Distribution List

Sequence of Events

Hoechst Celanese Chemical Ltd.

WDW 110 (Well #1-A) -- BHP Falloff Test

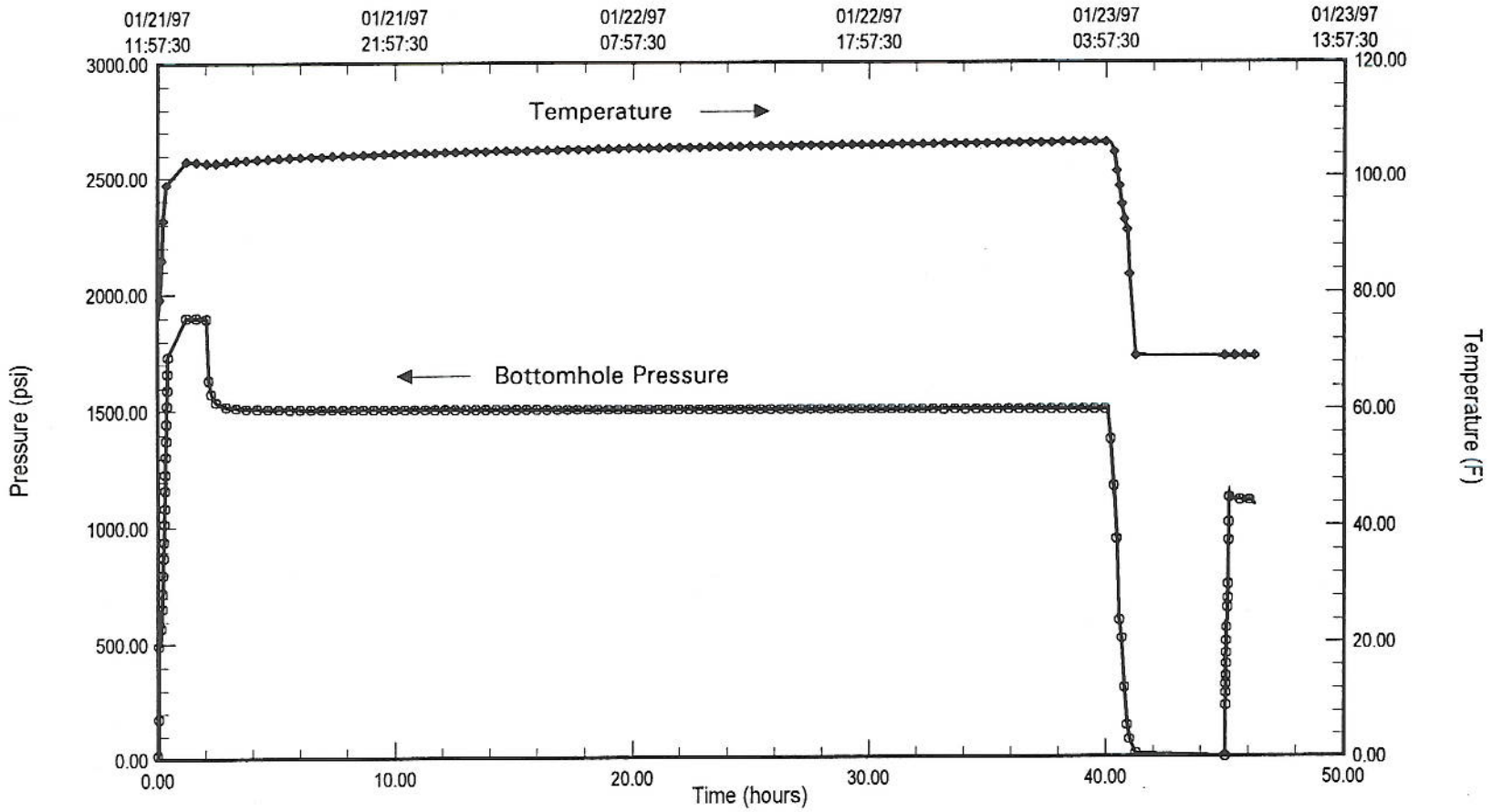
State	Texas	***Test Date***	January 21, 1997
City	Bay City	***Interpretation Date***	February 7, 1997
Field	Bay City Facility	***Report Number***	970207-001



Label Point / Comments	Date (dd-mm-yy)	Time (hh:mm:ss)	Gauge ET (hours)	BHP (psia)	Rate (bpd)
Production History Used in the Analysis					
	1-Jan-97	6:00:00	-485.958	0.00	-7131
	15-Jan-97	6:00:00	-149.958	0.00	-5486
	21-Jan-97	0:00:00	-11.958	0.00	-7097
Start Falloff	21-Jan-97	14:00:00	2.042	1894.59	0
End of Falloff	23-Jan-97	6:05:00	40.083	1498.94	0

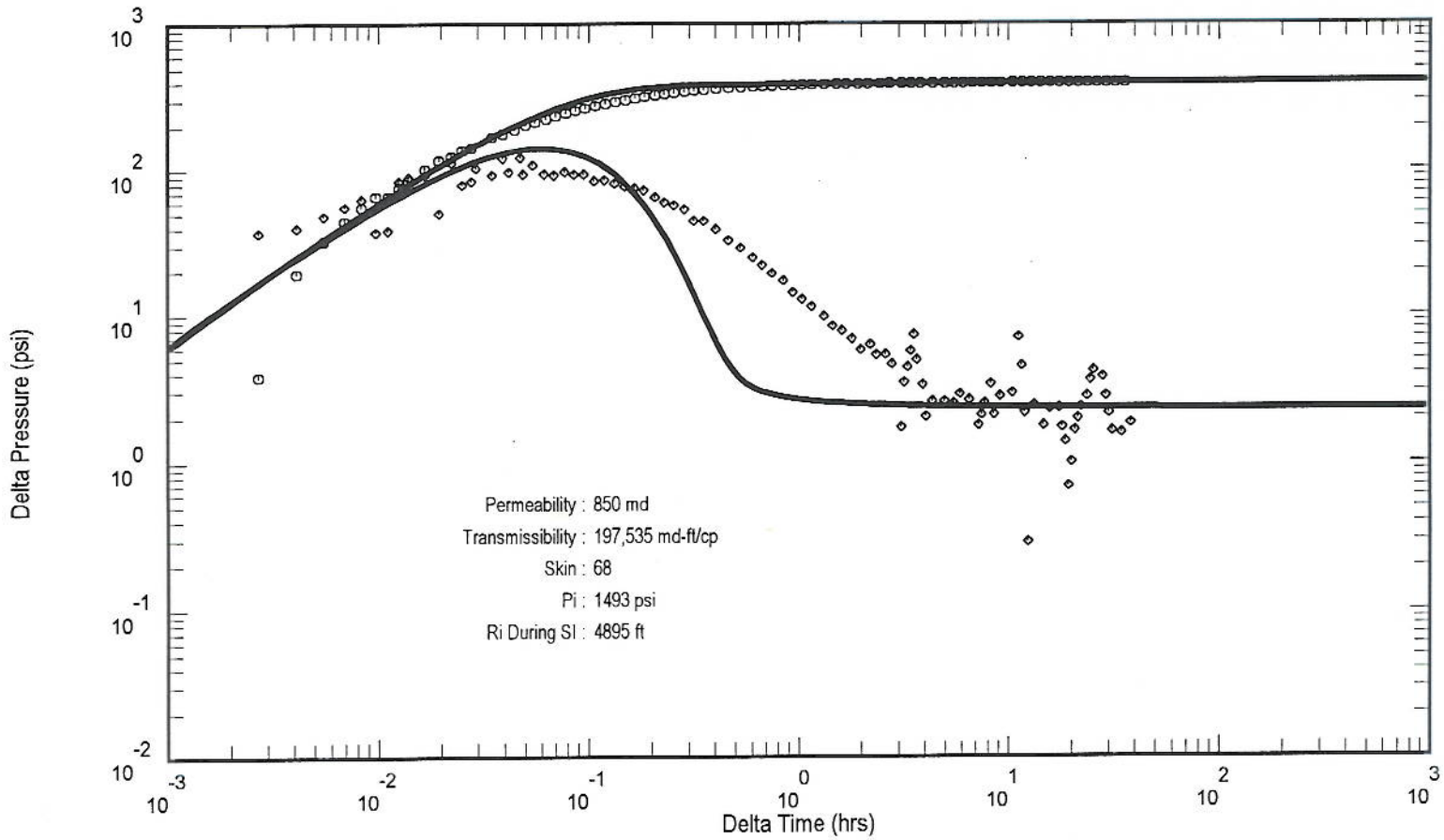
State ..... Texas	**Hoechst Celanese Chemical Ltd.**	***Test Date*** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	***Analysis Date*** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	***Report Number*** 970207-001

Bottomhole Pressure and Temperature Log



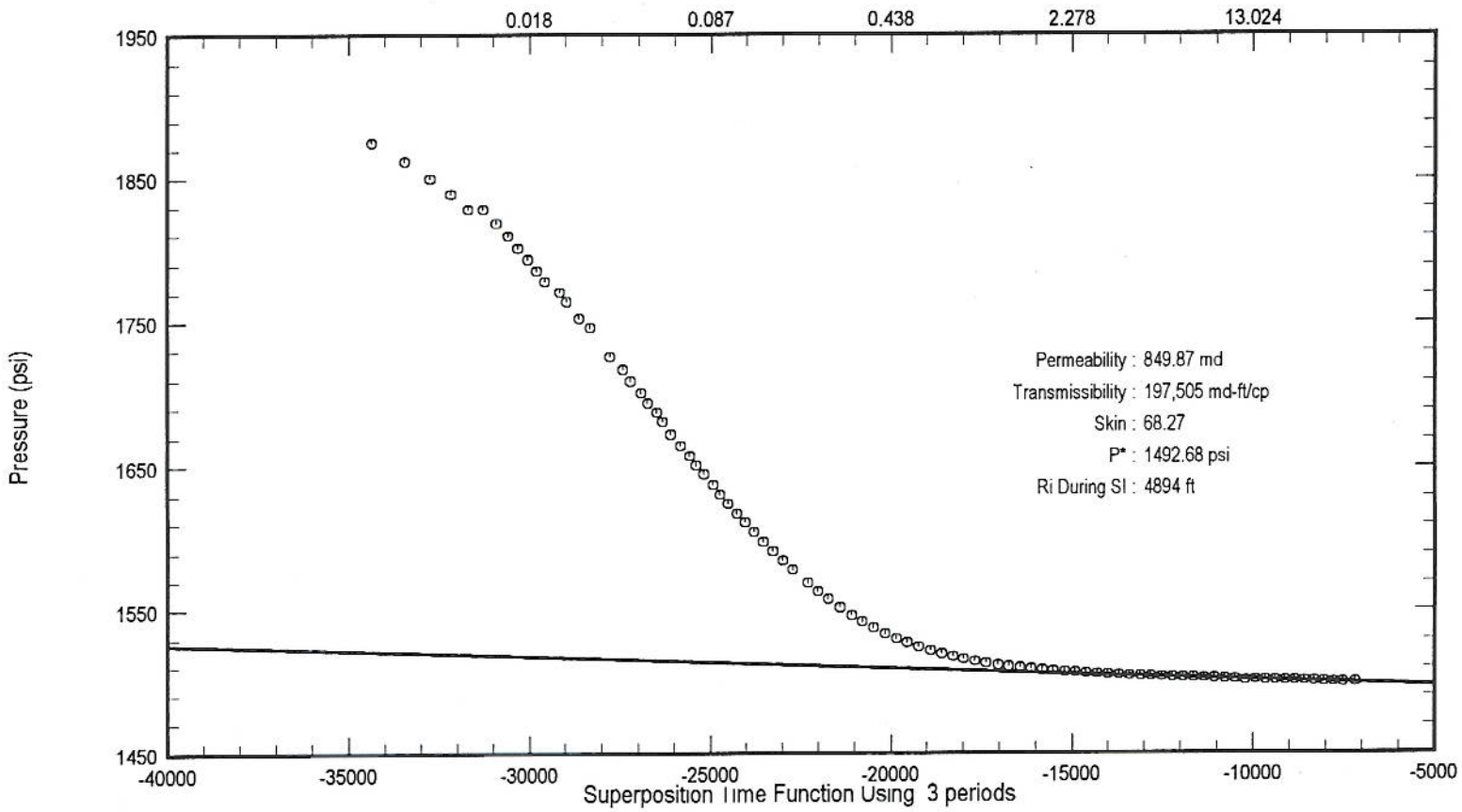
State ..... Texas	**Hoechst Celanese Chemical Ltd.**	***Test Date*** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	***Analysis Date*** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	***Report Number*** 970207-001

Log-Log Match



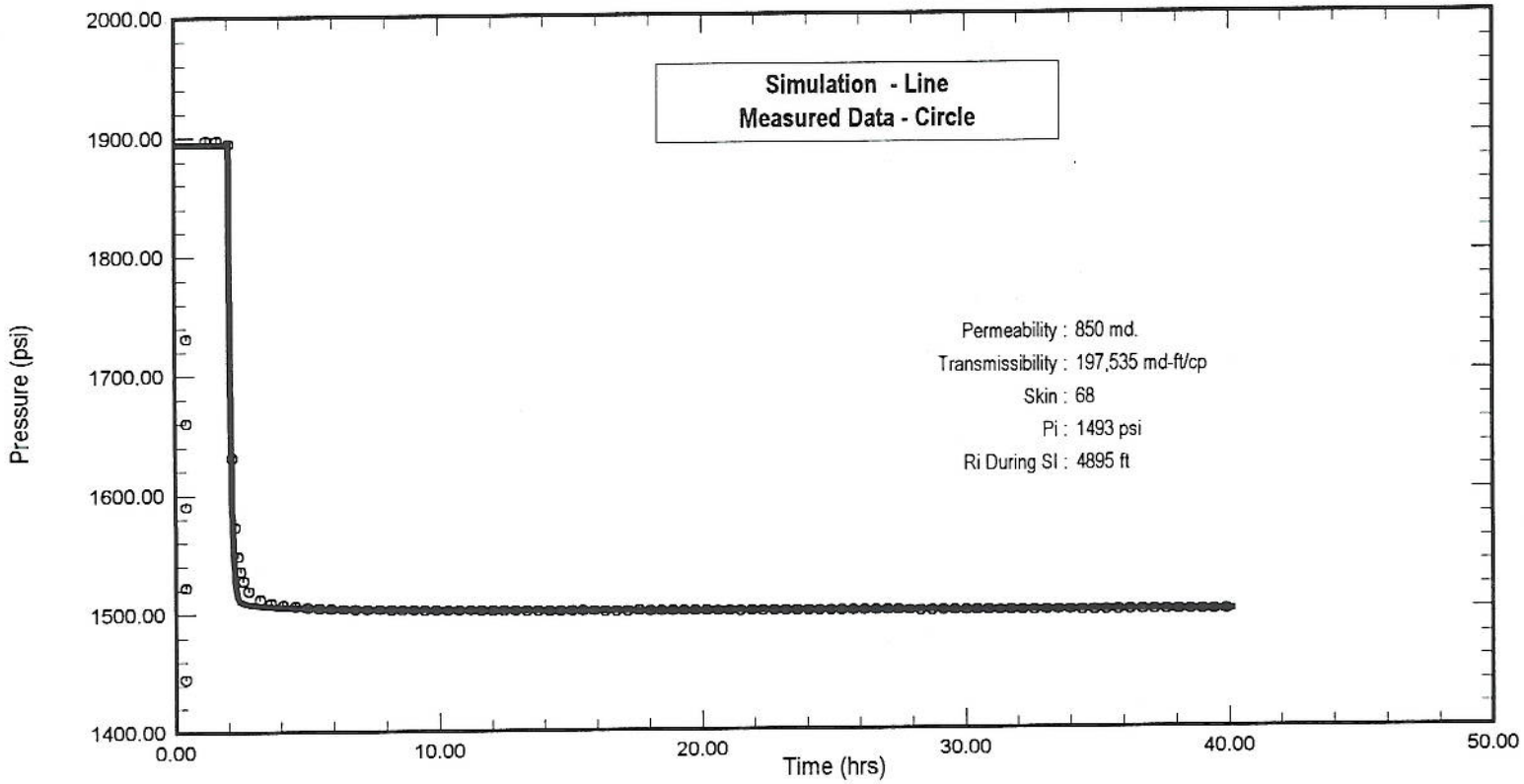
State ..... Texas	**Hoechst Celanese Chemical Ltd.**	***Test Date*** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	***Analysis Date*** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	***Report Number*** 970207-001

Superposition Analysis



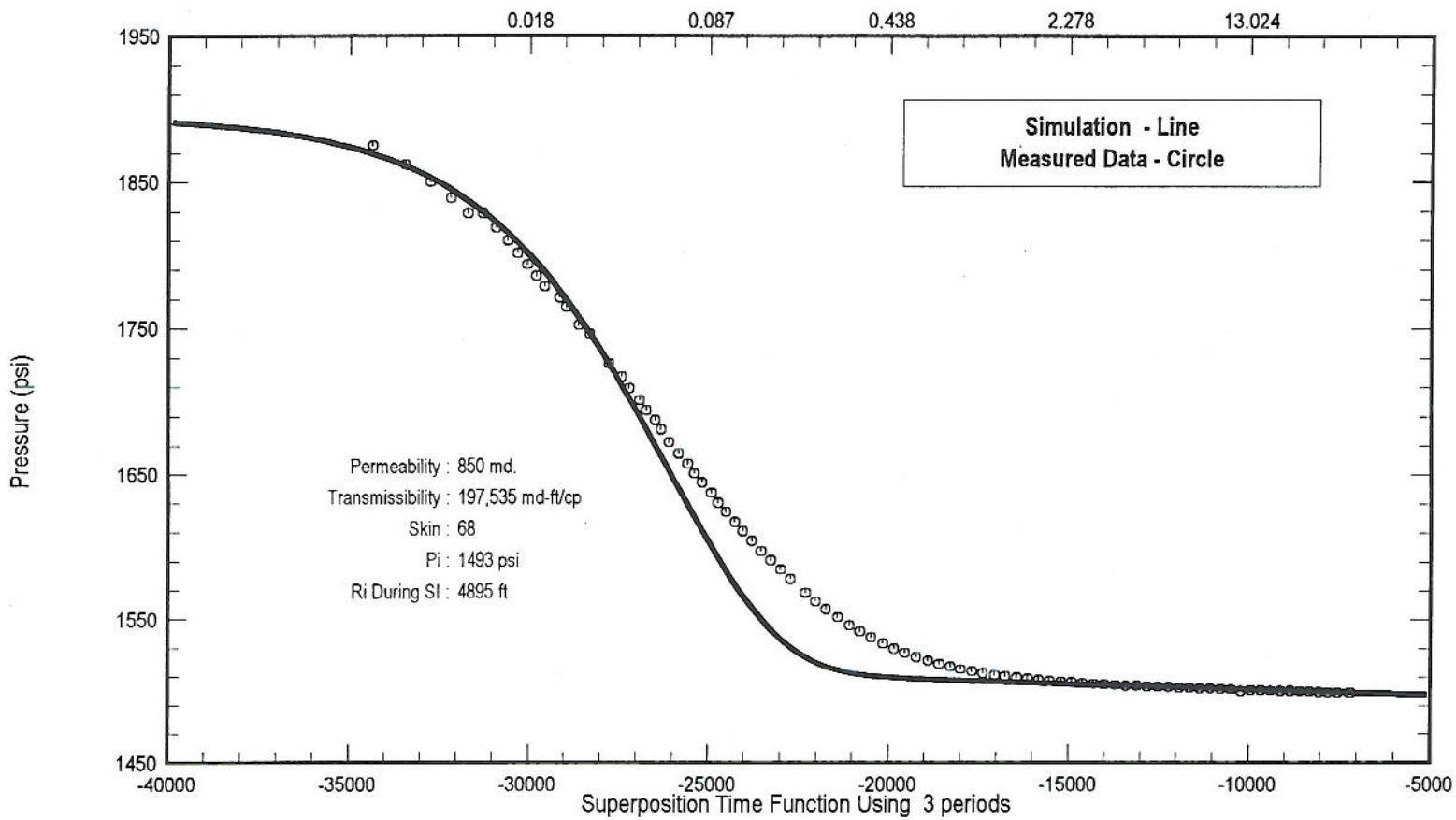
State ..... Texas ***City*** ..... Bay City ***Field*** ..... Bay City Facility	**Hoechst Celanese Chemical Ltd.** ***WDW 110 (Well #1-A)*** **BHP Falloff Test**	***Test Date*** ..... 21-Jan-97 ***Analysis Date*** ..... 7-Feb-97 ***Report Number*** 970207-001

Pressure History Simulation



State ..... Texas	**Hoechst Celanese Chemical Ltd.**	***Test Date*** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	***Analysis Date*** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	***Report Number*** 970207-001

Superposition Simulation



State ..... Texas	**Hoechst Celanese Chemical Ltd.**	**Test Date** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	**Analysis Date** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	**Report Number** 970207-001

Input Data

Porosity (%) [phi]: 33.0%	*Open Hole Radius (ft) [rw] :* 0.300	*Gauge Depth (ft) :* 3300
Viscosity (cp) [u] : 0.710	*Net Zone Thickness (ft) [h] :* 165	*Top of Perforations :* 3376
FVF (Rbl/Stb) [B] : 1.006	*Rate During Period (mscfd) [qn] :* 0	*Bottom of Perforations :* 3572
Total Compressibility (1/psi) [ct] : 6.000E-06	*ABS(Rate Prior to Period (mscfd)) [qn-1] :* 7097	*BHT (F) :* 105

Log - Log Analysis

Permeability

kh = 141.2 (delta q)(u)(B)(Pd/dp)
kh = 141.2 * (7097) * (0.710) * (1.006) * (1.9590E-1)
kh = 140,220 md-ft
k = 850 md

Wellbore Storage Coefficient

C(1) = 0.000295 (kh) / (u * [TD/CD]/dt)
C(1) = 0.000295 * (140250.00) / (0.710 * 1165.8538)
C(1) = 0.050
CD = 0.8936 C(1) / (phi * ct * h * rw^2)
CD = 0.8936 * 5.0E-2 / (0.33000 * 6.00E-6 * 165 * 0.3^2)
CD = 1519

C(2) 0.046
CphiD = 0.1

Skin

S = 1/2 ln (CDe2s match / CD)
S = 1/2 ln (3.55E+62 / (1519.06))
S = 68

Radius of Investigation

ri = ((k * SI time) / (960 phi u ct))^.5
ri = ((850.00 * 38.04) / (960 * 0.330 * 0.71 * 6.00E-6))^.5
ri = 4895 ft

State ..... Texas	**Hoechst Celanese Chemical Ltd.**	**Test Date** 21-Jan-97
City ..... Bay City	***WDW 110 (Well #1-A)***	**Analysis Date** 7-Feb-97
Field ..... Bay City Facility	**BHP Falloff Test**	**Report Number** 970207-001

Input Data

Porosity (%) [phi]:	33.0%	*Open Hole Radius (ft) [rw] :*	0.3	*Gauge Depth (ft) :*	3300
Viscosity (cp) [u] :	0.710	*Net Zone Thickness (ft) [h] :*	165	*Top of Perforations :*	3376
FVF (Rbl/Stb) [B] :	1.006	*Rate During Period (mscfd) [qn] :*	0	*Bottom of Perforations :*	3572
Total Compressibility (1/psi) [ct] :	6.000E-06	*ABS(Rate Prior to Period (mscfd)) [qn-1] :*	7097	*BHT (F) :*	105

Superposition Analysis

Permeability

kh = 162.6 (u) (B) / m'
kh = 162.6 * (0.710) * (1.006) / (0.00082836)
kh = 140,203 md-ft
k = 849.72 md

Skin

S = 1.1513((P1hr - Pwf)/ (m' delta q) - log(k / (phi u ct rw^2)) + 3.227)
S = 1.1513((387.4 / (.00082836 * 7097) - log(849.870 / (0.330 * 0.710 * 6.00E-06 * 0.3^2)) + 3.227)
S = 68.27

Radial Flow Line Parameters (Superposition Plot)

Start Radial Flow Line (hrs) :	4.175	*RSqr :*	0.987
End Radial Flow Line (hrs) :	18.625	*Number of Points :*	44
tart Radial Flow Line (SF) :	18.625	*P* (psi) :*	1492.68
End Radial Flow Line (SF) :	-13213.27		
Superposition Slope :	-8.2836E-04		
Horner Slope (psi/log-cycle) :	-5.877923		

APPENDIX E

FALLOFF DATA & FLOW RATE DATA

SOLUTIONS, INC.

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
0.0000	14.85	75.50	1.35	1.3667	1897.76	102.90	-40.56
0.0167	14.80	75.50	1.35	1.3833	1897.71	102.90	-40.42
0.0194	14.82	75.50	1.35	1.4000	1897.77	102.90	-40.10
0.0222	14.82	75.50	1.35	1.4167	1897.80	102.90	-0.40
0.0250	14.82	75.60	1.35	1.4333	1897.73	102.90	-0.40
0.0278	14.85	75.60	1.35	1.4500	1897.88	102.80	-0.40
0.0306	14.83	75.60	1.35	1.4667	1898.03	102.80	-0.40
0.0333	14.80	75.60	1.35	1.4833	1898.14	102.80	-0.40
0.0361	14.82	75.60	1.35	1.5000	1897.92	102.80	-0.40
0.0389	15.20	75.60	1.35	1.5167	1897.80	102.80	-0.40
0.0417	33.14	75.60	1.35	1.5333	1897.78	102.80	-0.40
0.0444	175.76	75.60	1.35	1.5500	1897.64	102.80	-0.40
0.0472	490.04	75.80	1.35	1.5667	1897.76	102.80	-0.40
0.0500	489.71	75.80	1.35	1.5833	1897.83	102.80	-0.40
0.0528	489.63	76.00	1.35	1.6000	1897.86	102.80	-0.40
0.0556	489.13	76.20	1.35	1.6167	1897.86	102.80	-0.40
0.0583	488.99	76.40	1.35	1.6333	1897.87	102.80	-0.40
0.0611	489.08	76.50	1.35	1.6500	1897.96	102.80	-0.40
0.0639	488.99	76.70	1.35	1.6667	1897.91	102.80	-0.40
0.0667	489.03	76.90	1.35	1.6833	1898.01	102.80	-0.40
0.0694	489.14	77.10	1.35	1.7000	1897.76	102.80	-0.40
0.0722	489.46	77.20	1.35	1.7167	1897.82	102.80	-0.40
0.0750	489.57	77.40	1.35	1.7333	1897.95	102.80	-0.40
0.0778	489.74	77.60	1.35	1.7500	1898.15	102.70	-0.40
0.0806	489.47	77.80	1.35	1.7667	1898.11	102.70	-0.40
0.0833	489.94	78.00	1.35	1.7833	1898.06	102.70	496.14
0.0861	490.05	78.10	1.35	1.8000	1897.88	102.70	494.27
0.0889	489.64	78.30	1.35	1.8167	1897.95	102.70	494.83
0.0917	489.73	78.60	1.35	1.8333	1898.04	102.70	495.33
0.0944	489.86	78.80	1.35	1.8500	1898.15	102.70	494.97
0.0972	490.23	79.00	1.35	1.8667	1898.13	102.70	494.90
0.1000	490.22	79.10	1.35	1.8833	1898.17	102.70	494.60
0.1028	490.12	79.30	1.35	1.9000	1898.10	102.70	494.73
0.1083	490.63	79.70	1.35	1.9167	1898.11	102.70	495.34
0.1111	492.38	79.90	1.35	1.9333	1898.18	102.70	496.05
0.1194	498.72	80.50	1.35	1.9514	1898.19	102.60	496.09
0.1222	501.06	80.80	1.35	1.9528	1898.26	102.60	496.73
0.1250	507.02	81.10	1.35	1.9542	1898.26	102.60	496.29
0.1278	512.98	81.50	1.35	1.9556	1898.25	102.60	496.23
0.1306	518.77	81.80	1.35	1.9569	1898.25	102.60	495.71
0.1333	521.84	82.00	1.35	1.9583	1898.25	102.60	495.65
0.1500	570.18	84.00	1.35	1.9597	1898.17	102.60	495.65
0.1667	599.87	85.90	1.35	1.9611	1898.17	102.60	495.82
0.1833	655.32	87.90	1.35	1.9625	1898.17	102.60	495.83
0.2000	720.02	89.50	1.35	1.9639	1898.17	102.60	496.05
0.2167	797.04	91.20	1.35	1.9653	1898.17	102.60	494.29
0.2333	872.95	92.70	1.35	1.9667	1892.61	102.60	494.29
0.2500	940.46	93.90	1.35	1.9681	1889.87	102.60	489.76
0.2667	1016.80	95.00	1.35	1.9694	1889.27	102.60	488.65
0.2833	1084.97	95.90	1.35	1.9708	1889.27	102.60	488.43
0.3000	1161.99	96.90	1.35	1.9722	1889.27	102.60	489.17
0.3167	1230.15	97.60	1.35	1.9736	1889.71	102.60	489.15
0.3333	1307.07	98.30	1.35	1.9750	1890.22	102.60	489.15
0.3500	1375.23	98.80	1.35	1.9764	1890.88	102.60	489.20
0.3667	1445.13	99.30	1.35	1.9778	1891.51	102.60	489.97
0.3833	1521.86	99.80	1.35	1.9792	1891.98	102.60	490.23
0.4000	1590.48	100.20	1.35	1.9806	1891.98	102.60	490.96
0.4167	1660.11	100.50	1.35	1.9819	1892.48	102.60	491.23
0.4333	1731.29	100.80	1.35	1.9833	1893.00	102.60	491.23
1.2000	1897.72	102.90	1.35	1.9847	1893.50	102.60	491.42
1.2167	1897.65	102.90	1.35	1.9861	1893.94	102.60	491.99
1.2333	1897.65	102.90	1.35	1.9875	1894.46	102.60	492.65
1.2500	1897.64	102.90	1.35	1.9889	1894.46	102.60	492.17
1.2667	1897.71	102.90	1.35	1.9903	1894.81	102.60	492.33
1.2833	1897.74	102.90	1.35	1.9917	1895.20	102.60	492.33
1.3000	1897.77	102.90	-34.00	1.9931	1895.33	102.60	492.97
1.3167	1897.80	102.90	-40.68	1.9986	1895.97	102.60	494.70
1.3333	1897.79	102.90	-40.94	2.0000	1896.19	102.60	494.01
1.3500	1897.80	102.90	-40.67	2.0014	1896.19	102.60	494.06

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
2.0028	1896.23	102.60	494.47	2.1014	1672.63	102.60	251.02
2.0042	1896.23	102.60	493.82	2.1028	1672.63	102.60	248.17
2.0056	1896.30	102.60	493.84	2.1042	1669.93	102.60	245.49
2.0069	1896.30	102.60	493.84	2.1056	1667.34	102.60	245.49
2.0083	1896.31	102.60	493.83	2.1069	1664.80	102.60	242.96
2.0097	1896.27	102.60	493.17	2.1083	1662.37	102.60	240.49
2.0111	1896.25	102.60	493.39	2.1097	1659.93	102.60	238.19
2.0125	1896.25	102.60	492.74	2.1111	1659.93	102.60	235.87
2.0139	1896.04	102.60	492.68	2.1125	1657.66	102.60	233.53
2.0153	1895.93	102.60	492.68	2.1139	1655.38	102.60	233.53
2.0167	1895.71	102.60	493.14	2.1153	1653.14	102.60	231.42
2.0181	1895.68	102.60	492.24	2.1167	1651.06	102.60	229.43
2.0194	1895.46	102.60	492.19	2.1181	1648.84	102.60	227.36
2.0208	1895.46	102.60	491.70	2.1194	1648.84	102.60	225.32
2.0222	1895.36	102.60	491.49	2.1208	1646.80	102.60	223.41
2.0236	1895.26	102.60	491.49	2.1222	1644.87	102.60	221.63
2.0250	1895.16	102.60	492.11	2.1236	1642.92	102.60	221.63
2.0264	1895.09	102.60	491.01	2.1250	1640.97	102.60	219.66
2.0278	1895.01	102.60	491.20	2.1264	1639.14	102.60	217.94
2.0292	1895.01	102.60	491.18	2.1278	1639.14	102.60	216.16
2.0306	1894.97	102.60	492.03	2.1292	1637.45	102.60	214.46
2.0319	1894.84	102.60	492.03	2.1306	1635.64	102.60	212.71
2.0333	1894.76	102.60	490.95	2.1319	1633.99	102.60	212.71
2.0347	1894.75	102.60	490.95	2.1333	1632.27	102.60	210.99
2.0361	1894.62	102.60	490.94	2.1347	1630.61	102.60	209.34
2.0375	1894.62	102.60	490.73	2.1361	1629.08	102.60	207.72
2.0389	1894.61	102.60	490.90	2.1375	1629.08	102.60	206.15
2.0403	1894.61	102.60	490.90	2.1389	1627.21	102.60	204.47
2.0417	1894.59	102.60	491.44	2.1403	1625.84	102.60	204.47
2.0431	1890.79	102.60	416.70	2.1417	1624.34	102.60	202.92
2.0444	1890.79	102.60	471.16	2.1431	1622.77	102.60	201.51
2.0458	1875.36	102.60	464.03	2.1444	1622.77	102.60	199.89
2.0472	1862.17	102.60	466.66	2.1458	1621.43	102.50	198.42
2.0486	1850.24	102.60	466.66	2.1472	1620.07	102.60	197.08
2.0500	1839.24	102.60	424.81	2.1486	1618.59	102.60	197.08
2.0514	1828.67	102.60	424.75	2.1500	1617.41	102.50	195.62
2.0528	1828.67	102.60	398.39	2.1542	1614.82	102.50	191.74
2.0542	1818.77	102.60	388.57	2.1556	1613.48	102.60	190.48
2.0556	1809.88	102.60	380.93	2.1569	1612.29	102.50	190.48
2.0569	1801.38	102.60	380.93	2.1583	1611.14	102.60	189.23
2.0583	1793.55	102.60	373.10	2.1597	1609.95	102.50	188.06
2.0597	1785.81	102.60	365.34	2.1611	1608.70	102.60	186.83
2.0611	1778.64	102.60	357.80	2.1625	1608.70	102.60	185.65
2.0625	1778.64	102.60	350.95	2.1639	1607.53	102.60	184.53
2.0639	1771.05	102.60	343.65	2.1653	1606.46	102.60	184.53
2.0653	1764.55	102.60	343.65	2.1667	1605.42	102.60	183.44
2.0667	1758.45	102.60	337.34	2.1681	1604.39	102.50	182.28
2.0681	1752.58	102.60	331.25	2.1694	1603.37	102.50	181.28
2.0694	1752.58	102.60	325.54	2.1708	1603.37	102.50	180.22
2.0708	1746.26	102.60	319.63	2.1722	1602.21	102.60	179.21
2.0722	1740.95	102.60	319.63	2.1736	1601.29	102.50	178.29
2.0764	1726.21	102.60	304.75	2.1750	1600.28	102.50	178.29
2.0778	1726.21	102.60	300.22	2.1764	1599.31	102.50	177.34
2.0792	1721.62	102.60	295.84	2.1778	1598.35	102.50	176.33
2.0806	1717.28	102.60	295.84	2.1792	1597.35	102.50	175.48
2.0819	1713.18	102.60	291.67	2.1806	1597.35	102.50	174.64
2.0833	1709.23	102.60	287.65	2.1819	1596.34	102.50	174.64
2.0847	1705.28	102.60	283.78	2.1833	1595.46	102.50	173.63
2.0861	1705.28	102.60	280.04	2.1847	1594.52	102.50	172.77
2.0875	1701.22	102.60	276.03	2.1861	1593.64	102.50	171.82
2.0889	1697.61	102.60	276.03	2.1875	1593.64	102.50	170.96
2.0903	1694.19	102.60	272.63	2.1889	1592.79	102.50	170.14
2.0917	1690.82	102.60	269.24	2.1903	1591.82	102.50	170.14
2.0931	1690.82	102.60	265.92	2.1917	1591.03	102.50	169.19
2.0944	1687.65	102.60	263.62	2.1931	1590.15	102.50	168.41
2.0958	1684.43	102.60	261.01	2.1944	1589.35	102.50	167.64
2.0972	1681.34	102.60	261.01	2.1958	1589.35	102.50	166.72
2.0986	1678.37	102.60	257.56	2.1972	1588.55	102.50	166.00
2.1000	1675.47	102.60	254.08	2.1986	1587.73	102.50	166.00

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
2.2000	1587.00	102.50	165.27	2.3722	1542.53	102.60	120.49
2.2014	1586.19	102.50	164.45	2.3750	1542.46	102.60	120.01
2.2028	1585.40	102.50	163.70	2.3778	1541.94	102.60	119.83
2.2042	1585.40	102.50	162.84	2.3806	1541.45	102.60	119.39
2.2056	1584.67	102.50	162.11	2.3833	1541.21	102.60	118.90
2.2069	1583.75	102.50	162.11	2.3861	1540.87	102.60	118.70
2.2083	1583.11	102.50	161.25	2.3889	1540.42	102.60	118.27
2.2097	1582.40	102.50	160.56	2.3917	1540.19	102.60	117.84
2.2111	1581.71	102.50	159.82	2.3944	1539.72	102.60	117.61
2.2125	1581.71	102.50	159.23	2.3972	1539.59	102.60	117.18
2.2139	1581.00	102.50	158.45	2.4000	1539.25	102.60	116.73
2.2153	1580.31	102.50	158.45	2.4028	1538.76	102.60	116.56
2.2167	1579.53	102.50	157.82	2.4056	1538.69	102.60	116.13
2.2181	1579.02	102.50	157.19	2.4083	1538.32	102.60	115.91
2.2194	1579.02	102.50	156.54	2.4139	1537.69	102.60	115.31
2.2208	1578.19	102.50	155.88	2.4167	1537.34	102.60	115.15
2.2222	1577.59	102.50	155.88	2.4194	1537.11	102.60	114.82
2.2236	1576.95	102.50	155.25	2.4222	1536.75	102.60	114.66
2.2250	1576.28	102.50	154.67	2.4250	1536.55	102.60	114.31
2.2264	1575.65	102.50	154.02	2.4278	1536.27	102.60	114.08
2.2278	1575.65	102.50	153.43	2.4306	1536.02	102.60	114.00
2.2319	1573.89	102.50	152.19	2.4333	1535.69	102.60	113.62
2.2333	1573.21	102.50	151.54	2.4361	1535.48	102.60	113.26
2.2347	1572.73	102.50	150.99	2.4389	1535.16	102.60	113.10
2.2361	1572.73	102.50	150.33	2.4417	1534.94	102.60	112.86
2.2472	1568.86	102.50	146.47	2.4444	1534.82	102.60	112.67
2.2500	1567.87	102.50	145.97	2.4472	1534.44	102.60	112.43
2.2528	1566.84	102.50	144.88	2.4500	1534.19	102.60	112.16
2.2556	1566.35	102.50	143.88	2.4528	1533.87	102.60	111.97
2.2583	1565.32	102.50	143.40	2.4556	1533.50	102.60	111.64
2.2611	1564.86	102.50	142.35	2.4583	1533.43	102.60	111.32
2.2639	1563.92	102.50	141.75	2.4611	1533.12	102.60	111.18
2.2667	1562.90	102.50	140.82	2.4639	1533.00	102.60	110.95
2.2694	1562.52	102.50	139.76	2.4667	1532.72	102.60	110.76
2.2722	1561.60	102.50	139.50	2.4694	1532.37	102.60	110.45
2.2750	1561.23	102.50	138.43	2.4722	1532.27	102.60	110.14
2.2778	1560.34	102.50	137.47	2.4750	1531.99	102.60	109.96
2.2806	1559.44	102.50	137.24	2.4778	1531.75	102.60	109.70
2.2833	1559.10	102.50	136.27	2.4806	1531.52	102.60	109.39
2.2861	1558.24	102.50	135.41	2.4833	1531.35	102.60	109.25
2.2889	1557.46	102.50	135.14	2.4861	1531.08	102.60	109.03
2.2917	1557.07	102.50	134.29	2.4889	1530.99	102.60	108.79
2.2944	1556.20	102.50	133.74	2.4917	1530.71	102.60	108.61
2.2972	1555.48	102.50	133.08	2.4944	1530.51	102.60	108.46
2.3000	1555.13	102.50	132.30	2.4972	1530.30	102.60	108.27
2.3028	1554.39	102.50	131.78	2.5000	1529.93	102.60	107.96
2.3056	1553.74	102.50	131.10	2.5028	1529.93	102.60	107.75
2.3083	1553.35	102.50	130.39	2.5056	1529.63	102.60	107.62
2.3111	1552.70	102.50	130.19	2.5083	1529.46	102.60	107.34
2.3139	1552.01	102.50	129.51	2.5111	1529.26	102.60	107.08
2.3167	1551.70	102.50	128.86	2.5139	1529.12	102.60	106.93
2.3194	1551.01	102.50	128.61	2.5167	1528.88	102.60	106.81
2.3222	1550.77	102.50	127.90	2.5194	1528.66	102.60	106.66
2.3250	1550.03	102.50	127.67	2.5222	1528.54	102.60	106.51
2.3278	1549.48	102.50	126.99	2.5278	1528.19	102.60	106.25
2.3306	1549.06	102.60	126.34	2.5306	1528.09	102.60	106.05
2.3333	1548.41	102.60	125.92	2.5333	1527.85	102.60	105.81
2.3361	1547.86	102.60	125.46	2.5361	1527.72	102.60	105.64
2.3389	1547.63	102.60	124.99	2.5389	1527.65	102.60	105.52
2.3417	1547.08	102.50	124.74	2.5417	1527.43	102.60	105.28
2.3444	1546.83	102.50	124.27	2.5444	1527.22	102.60	105.14
2.3472	1546.21	102.60	124.04	2.5472	1527.12	102.60	104.99
2.3500	1545.65	102.60	123.59	2.5500	1526.88	102.70	104.81
2.3528	1545.52	102.60	123.08	2.5528	1526.64	102.70	104.62
2.3556	1544.91	102.60	122.65	2.5556	1526.60	102.60	104.53
2.3583	1544.62	102.60	122.17	2.5583	1526.43	102.70	104.49
2.3611	1544.21	102.60	121.79	2.5611	1526.25	102.70	104.36
2.3639	1543.71	102.60	121.57	2.5639	1526.13	102.70	104.23
2.3667	1543.62	102.60	121.10	2.5667	1525.98	102.70	104.09

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
2.5694	1525.76	102.70	103.98	3.0250	1513.35	102.90	91.48
2.5722	1525.72	102.70	103.80	3.0333	1513.26	102.90	91.44
2.5750	1525.55	102.70	103.61	3.0417	1513.16	102.90	91.18
2.5806	1525.22	102.70	103.33	3.0500	1513.05	102.90	90.94
2.5833	1525.12	102.70	103.14	3.0583	1512.85	102.90	90.84
2.5861	1525.01	102.70	103.07	3.0667	1512.75	102.90	90.68
2.5889	1524.86	102.70	102.83	3.0750	1512.70	102.90	90.65
2.5917	1524.78	102.70	102.58	3.0833	1512.62	102.90	90.66
2.5944	1524.61	102.70	102.52	3.0917	1512.53	102.90	90.69
2.5972	1524.39	102.70	102.33	3.1000	1512.47	102.90	90.60
2.6000	1524.30	102.70	102.21	3.1083	1512.30	102.90	90.48
2.6028	1524.17	102.70	102.14	3.1167	1512.19	102.90	90.43
2.6056	1524.09	102.70	102.02	3.1250	1512.09	102.90	90.29
2.6083	1523.97	102.70	101.91	3.1333	1511.99	102.90	90.25
2.6111	1523.75	102.70	101.85	3.1417	1511.93	102.90	90.21
2.6139	1523.72	102.70	101.78	3.1500	1511.87	102.90	90.20
2.6167	1523.48	102.70	101.71	3.1583	1511.74	102.90	90.12
2.6194	1523.35	102.70	101.58	3.1667	1511.69	102.90	90.05
2.6222	1523.35	102.70	101.47	3.1750	1511.60	102.90	90.02
2.6250	1523.12	102.70	101.39	3.1833	1511.53	102.90	90.00
2.6278	1523.03	102.70	101.21	3.1917	1511.41	102.90	89.98
2.6306	1523.02	102.70	101.05	3.2000	1511.40	103.00	89.78
2.6333	1522.88	102.70	100.87	3.2083	1511.23	103.00	89.49
2.6417	1522.53	102.70	100.47	3.2167	1511.20	102.90	89.36
2.6500	1522.26	102.70	100.12	3.2250	1511.12	103.00	89.19
2.6583	1521.89	102.70	99.83	3.2333	1511.04	102.90	89.00
2.6667	1521.55	102.70	99.44	3.2417	1511.01	103.00	88.96
2.6750	1521.22	102.70	99.25	3.2500	1510.96	103.00	88.82
2.6833	1520.89	102.70	98.92	3.2583	1510.88	103.00	88.76
2.6917	1520.59	102.70	98.55	3.2667	1510.74	103.00	88.75
2.7000	1520.22	102.70	98.28	3.2750	1510.71	103.00	88.71
2.7083	1520.08	102.70	97.99	3.2833	1510.64	103.00	88.67
2.7167	1519.84	102.70	97.75	3.2917	1510.62	103.00	88.61
2.7250	1519.55	102.70	97.57	3.3000	1510.50	103.00	88.60
2.7333	1519.25	102.70	97.33	3.3083	1510.47	103.00	88.53
2.7417	1519.05	102.70	97.14	3.3167	1510.40	103.00	88.42
2.7500	1518.77	102.70	96.95	3.3250	1510.32	103.00	88.32
2.7583	1518.61	102.70	96.70	3.3333	1510.31	103.00	88.28
2.7667	1518.39	102.70	96.45	3.3417	1510.24	103.00	88.25
2.7750	1518.21	102.80	96.27	3.3500	1510.11	103.00	88.29
2.7833	1517.90	102.80	96.16	3.3583	1510.08	103.00	88.40
2.7917	1517.70	102.80	95.87	3.3667	1510.00	103.00	88.46
2.8000	1517.51	102.80	95.84	3.3750	1509.96	103.00	88.42
2.8083	1517.32	102.80	95.70	3.3833	1509.94	103.00	88.35
2.8167	1517.13	102.80	95.43	3.3917	1509.89	103.00	88.27
2.8250	1516.91	102.80	95.23	3.4000	1509.76	103.00	88.24
2.8333	1516.71	102.80	95.13	3.4083	1509.74	103.00	88.30
2.8417	1516.50	102.80	95.00	3.4167	1509.69	103.00	88.33
2.8500	1516.42	102.80	94.78	3.4250	1509.61	103.00	88.31
2.8583	1516.24	102.80	94.45	3.4333	1509.54	103.00	88.31
2.8667	1516.00	102.80	94.30	3.4417	1509.53	103.00	88.41
2.8750	1515.84	102.80	94.09	3.4500	1509.43	103.00	88.41
2.8833	1515.58	102.80	93.95	3.4583	1509.44	103.00	88.26
2.8917	1515.46	102.80	93.80	3.4667	1509.34	103.00	88.09
2.9000	1515.34	102.80	93.62	3.4750	1509.32	103.00	88.02
2.9083	1515.18	102.80	93.38	3.4833	1509.29	103.00	87.87
2.9167	1515.03	102.80	93.17	3.4917	1509.19	103.10	87.85
2.9250	1514.87	102.80	92.98	3.5000	1509.18	103.00	87.94
2.9333	1514.74	102.80	92.86	3.5083	1509.09	103.10	87.78
2.9417	1514.51	102.80	92.72	3.5167	1509.07	103.10	87.76
2.9500	1514.41	102.80	92.59	3.5250	1509.03	103.10	87.87
2.9583	1514.28	102.80	92.40	3.5333	1508.99	103.10	87.92
2.9667	1514.18	102.80	92.20	3.5417	1508.90	103.10	87.87
2.9750	1514.05	102.80	92.12	3.5500	1508.87	103.10	87.66
2.9833	1513.96	102.80	92.07	3.5583	1508.84	103.10	87.50
2.9917	1513.82	102.90	92.00	3.5667	1508.78	103.10	87.10
3.0000	1513.70	102.80	91.76	3.5750	1508.81	103.10	86.90
3.0083	1513.56	102.90	91.61	3.5833	1508.75	103.10	86.76
3.0167	1513.35	102.90	91.55	3.5917	1508.71	103.10	86.61

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
3.6000	1508.64	103.10	86.43	4.7333	1505.38	103.30	83.66
3.6083	1508.58	103.10	86.29	4.7500	1505.39	103.40	83.72
3.6167	1508.52	103.10	86.25	4.7667	1505.38	103.40	83.76
3.6333	1508.47	103.10	86.30	4.7833	1505.31	103.40	83.77
3.6500	1508.36	103.10	86.15	4.8000	1505.22	103.40	83.74
3.6667	1508.30	103.10	85.94	4.8167	1505.22	103.40	83.80
3.6833	1508.25	103.10	85.89	4.8333	1505.20	103.40	83.74
3.7000	1508.15	103.10	85.89	4.8500	1505.18	103.40	83.62
3.7167	1508.10	103.10	85.86	4.8667	1505.14	103.40	83.45
3.7333	1507.99	103.10	85.86	4.8833	1505.13	103.40	83.40
3.7500	1507.94	103.10	85.81	4.9000	1505.12	103.40	83.41
3.7667	1507.85	103.10	85.83	4.9167	1505.13	103.40	83.48
3.7833	1507.83	103.10	86.08	4.9333	1505.11	103.40	83.46
3.8000	1507.79	103.10	86.10	4.9500	1505.09	103.40	83.42
3.8167	1507.70	103.10	86.84	4.9667	1505.04	103.40	83.44
3.8333	1507.67	103.10	87.04	4.9833	1504.99	103.40	83.47
3.8500	1507.61	103.10	86.61	5.0000	1504.92	103.40	83.45
3.8667	1507.54	103.20	86.04	5.0167	1504.93	103.40	83.38
3.8833	1507.42	103.10	85.69	5.0333	1504.87	103.40	83.32
3.9000	1507.35	103.20	85.50	5.0500	1504.84	103.40	83.33
3.9167	1507.34	103.20	85.41	5.0667	1504.88	103.40	83.30
3.9333	1507.21	103.20	85.36	5.0833	1504.81	103.40	83.31
3.9500	1507.23	103.20	85.38	5.1000	1504.84	103.40	83.24
3.9667	1507.20	103.20	85.68	5.1167	1504.83	103.40	83.07
3.9833	1507.16	103.20	85.81	5.1333	1504.81	103.40	83.06
4.0000	1507.05	103.20	85.60	5.1500	1504.72	103.40	82.96
4.0167	1507.01	103.20	85.45	5.1667	1504.73	103.40	82.89
4.0333	1506.97	103.20	85.52	5.1833	1504.72	103.40	82.88
4.0500	1506.94	103.20	85.41	5.2000	1504.71	103.40	82.85
4.0667	1506.88	103.20	85.32	5.2167	1504.71	103.40	82.79
4.0833	1506.90	103.20	85.19	5.2333	1504.68	103.50	82.75
4.1000	1506.79	103.20	85.21	5.2500	1504.65	103.50	82.73
4.1167	1506.78	103.20	85.01	5.2667	1504.55	103.40	82.72
4.1333	1506.69	103.20	84.64	5.2833	1504.58	103.50	82.71
4.1500	1506.63	103.20	84.63	5.3000	1504.50	103.50	82.75
4.1667	1506.60	103.20	84.58	5.3167	1505.41	103.50	83.68
4.1833	1506.51	103.20	84.49	5.3333	1504.96	103.50	83.30
4.2000	1506.48	103.20	84.47	5.3500	1504.73	103.50	83.15
4.2167	1506.48	103.20	84.43	5.3667	1504.63	103.50	82.97
4.2333	1506.43	103.20	84.51	5.3833	1504.59	103.50	82.90
4.2500	1506.39	103.20	84.50	5.4000	1504.48	103.50	82.72
4.2667	1506.33	103.30	84.50	5.4167	1504.43	103.50	82.60
4.2833	1506.24	103.30	84.51	5.4333	1504.36	103.50	82.54
4.3000	1506.27	103.20	84.44	5.4500	1504.31	103.50	82.47
4.3167	1506.26	103.30	84.33	5.4667	1504.30	103.50	82.44
4.3333	1506.16	103.30	84.30	5.4833	1504.27	103.50	82.39
4.3500	1506.13	103.30	84.34	5.5000	1504.29	103.50	82.43
4.3667	1506.12	103.30	84.32	5.5167	1504.29	103.50	82.42
4.3833	1506.06	103.30	84.23	5.5333	1504.20	103.50	82.41
4.4000	1506.00	103.30	84.28	5.5500	1504.31	103.50	82.38
4.4167	1505.98	103.30	84.30	5.5667	1504.31	103.50	82.36
4.4333	1505.99	103.30	84.36	5.5833	1504.27	103.50	82.34
4.4500	1505.94	103.30	84.31	5.6000	1504.21	103.50	82.30
4.4667	1505.92	103.30	84.32	5.6167	1504.23	103.50	82.28
4.4833	1505.81	103.30	84.26	5.6333	1504.24	103.50	82.14
4.5000	1505.80	103.30	84.27	5.6500	1504.18	103.50	82.00
4.5167	1505.82	103.30	84.28	5.6667	1504.15	103.50	81.75
4.5333	1505.71	103.30	84.33	5.6833	1504.11	103.50	81.69
4.5500	1505.73	103.30	84.31	5.7000	1504.12	103.50	81.54
4.5667	1505.68	103.30	84.21	5.7167	1504.06	103.60	81.46
4.5833	1505.67	103.30	84.27	5.7333	1504.02	103.50	81.38
4.6000	1505.65	103.30	84.22	5.7500	1504.00	103.60	81.26
4.6167	1505.55	103.30	83.99	5.7667	1503.95	103.60	81.23
4.6333	1505.56	103.30	83.85	5.7833	1503.94	103.60	81.16
4.6500	1505.50	103.30	83.81	5.8000	1503.92	103.60	81.09
4.6667	1505.46	103.30	83.76	5.8167	1503.89	103.60	81.11
4.6833	1505.44	103.30	83.72	5.8333	1503.79	103.60	81.14
4.7000	1505.45	103.30	83.62	5.8500	1503.77	103.60	81.22
4.7167	1505.43	103.30	83.60	5.8667	1503.77	103.60	81.39

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
5.8833	1503.86	103.60	81.51	7.0333	1503.25	103.80	81.37
5.9000	1503.76	103.60	81.47	7.0667	1503.26	103.80	81.38
5.9167	1503.75	103.60	81.51	7.0833	1503.27	103.80	81.39
5.9333	1503.74	103.60	82.01	7.1000	1503.21	103.80	81.39
5.9500	1503.71	103.60	82.10	7.1167	1503.23	103.80	81.35
5.9667	1503.62	103.60	81.74	7.1333	1503.17	103.80	81.32
5.9833	1503.73	103.60	81.55	7.1500	1503.17	103.80	81.26
6.0000	1503.69	103.60	81.42	7.1667	1503.15	103.80	81.27
6.0167	1503.68	103.60	81.41	7.1833	1503.12	103.80	81.27
6.0333	1503.69	103.60	81.47	7.2000	1503.14	103.80	81.26
6.0500	1503.70	103.60	81.52	7.2167	1503.13	103.80	81.27
6.0667	1503.69	103.60	81.54	7.2333	1503.04	103.80	81.27
6.0833	1503.64	103.60	81.44	7.2500	1503.08	103.80	81.28
6.1000	1503.66	103.60	81.36	7.2667	1503.12	103.80	81.33
6.1167	1503.67	103.60	81.32	7.2833	1503.06	103.80	81.35
6.1333	1503.67	103.60	81.26	7.3000	1503.08	103.80	81.29
6.1500	1503.66	103.60	81.24	7.3167	1503.07	103.80	81.29
6.1667	1503.64	103.60	81.24	7.3333	1503.07	103.80	81.28
6.1833	1503.63	103.60	81.28	7.3500	1503.04	103.80	81.28
6.2000	1503.56	103.60	81.29	7.3667	1503.04	103.80	81.36
6.2167	1503.68	103.60	81.36	7.3833	1503.07	103.80	81.36
6.2333	1503.60	103.60	81.35	7.4000	1503.06	103.80	81.36
6.2500	1503.63	103.60	81.35	7.4167	1503.04	103.80	81.37
6.2667	1503.68	103.60	81.39	7.4333	1503.02	103.80	81.33
6.2833	1503.61	103.60	81.43	7.4500	1503.03	103.80	81.35
6.3000	1503.60	103.60	81.43	7.4667	1503.02	103.80	81.34
6.3167	1503.56	103.60	81.44	7.4833	1503.02	103.80	81.40
6.3333	1503.57	103.70	81.52	7.5000	1502.99	103.80	81.47
6.3500	1503.60	103.70	81.56	7.5167	1502.97	103.80	81.50
6.3667	1503.59	103.70	81.63	7.5333	1502.96	103.80	81.52
6.3833	1503.56	103.70	81.67	7.5500	1502.95	103.80	81.49
6.4000	1503.54	103.70	81.63	7.5667	1502.95	103.80	81.44
6.4167	1503.51	103.70	81.64	7.5833	1502.95	103.80	81.48
6.4333	1503.46	103.70	81.63	7.6000	1502.90	103.80	81.37
6.4500	1503.53	103.70	81.67	7.6167	1502.90	103.80	81.29
6.4667	1503.51	103.70	81.81	7.6333	1502.91	103.80	81.25
6.4833	1503.48	103.70	81.79	7.6500	1502.88	103.80	81.28
6.5000	1503.45	103.70	81.75	7.6667	1502.93	103.80	81.29
6.5167	1503.46	103.70	81.63	7.6833	1502.90	103.90	81.30
6.5333	1503.50	103.70	81.61	7.7000	1502.93	103.90	81.30
6.5500	1503.48	103.70	81.61	7.7167	1502.87	103.90	81.25
6.5667	1503.47	103.70	81.56	7.7333	1502.89	103.90	81.21
6.5833	1503.49	103.70	81.55	7.7500	1502.89	103.90	81.27
6.6000	1503.45	103.70	81.55	7.7667	1502.87	103.90	81.36
6.6167	1503.40	103.70	81.55	7.7833	1502.88	103.90	81.35
6.6333	1503.38	103.70	81.56	7.8000	1502.87	103.90	81.39
6.6500	1503.40	103.70	81.52	7.8167	1502.82	103.90	81.46
6.6667	1503.39	103.70	81.48	7.8333	1502.84	103.90	81.46
6.6833	1503.38	103.70	81.48	7.8500	1502.81	103.90	81.49
6.7000	1503.37	103.70	81.44	7.8667	1502.83	103.90	81.42
6.7167	1503.39	103.70	81.41	7.8833	1502.84	103.90	81.38
6.7333	1503.36	103.70	81.38	7.9000	1502.85	103.90	81.39
6.7500	1503.41	103.70	81.42	7.9167	1502.79	103.90	81.37
6.7667	1503.32	103.70	81.40	7.9333	1502.79	103.90	81.37
6.7833	1503.32	103.70	81.39	7.9500	1502.80	103.90	81.30
6.8000	1503.33	103.70	81.42	7.9667	1502.79	103.90	81.26
6.8167	1503.33	103.70	81.45	7.9833	1502.80	103.90	81.19
6.8333	1503.31	103.70	81.38	8.0000	1502.79	103.90	81.17
6.8500	1503.32	103.70	81.33	8.0167	1502.76	103.90	81.20
6.8667	1503.31	103.70	81.26	8.0333	1502.75	103.90	81.17
6.8833	1503.34	103.70	81.23	8.0500	1502.73	103.90	81.17
6.9000	1503.28	103.70	81.27	8.0667	1502.72	103.90	81.18
6.9167	1503.28	103.70	81.38	8.0833	1502.72	103.90	81.18
6.9333	1503.26	103.70	81.41	8.1000	1502.73	103.90	81.22
6.9500	1503.28	103.70	81.38	8.1167	1502.75	103.90	81.36
6.9667	1503.27	103.70	81.44	8.1333	1502.70	103.90	81.43
6.9833	1503.24	103.70	81.41	8.1500	1502.77	103.90	81.42
7.0000	1503.20	103.70	81.41	8.1667	1502.71	103.90	81.37
7.0167	1503.26	103.70	81.37	8.1833	1502.72	103.90	81.37

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
8.2000	1502.67	103.90	81.31	9.3500	1502.20	104.10	80.41
8.2167	1502.68	103.90	81.28	9.3667	1502.22	104.10	80.40
8.2333	1502.67	103.90	81.28	9.3833	1502.18	104.10	80.39
8.2500	1502.67	103.90	81.34	9.4000	1502.16	104.10	80.34
8.2667	1502.65	103.90	81.35	9.4167	1502.17	104.10	80.29
8.2833	1502.63	103.90	81.34	9.4333	1502.17	104.10	80.29
8.3000	1502.66	103.90	81.29	9.4500	1502.18	104.10	80.35
8.3167	1502.62	103.90	81.29	9.4667	1502.19	104.10	80.37
8.3333	1502.62	103.90	81.25	9.4833	1502.19	104.10	80.40
8.3500	1502.62	103.90	81.21	9.5000	1502.14	104.10	80.42
8.3667	1502.63	103.90	81.21	9.5167	1502.14	104.10	80.43
8.3833	1502.61	103.90	81.20	9.5333	1502.12	104.10	80.43
8.4000	1502.65	104.00	81.16	9.5500	1502.15	104.10	80.47
8.4167	1502.63	104.00	81.13	9.5667	1502.12	104.10	80.61
8.4333	1502.65	104.00	81.17	9.5833	1502.89	104.10	81.41
8.4500	1502.66	104.00	81.23	9.6000	1502.60	104.10	81.30
8.4667	1502.62	104.00	81.21	9.6167	1502.69	104.10	81.39
8.4833	1502.59	104.00	81.25	9.6333	1502.61	104.10	81.36
8.5000	1502.60	104.00	81.30	9.6500	1502.56	104.10	81.28
8.5167	1502.54	104.00	81.32	9.6667	1502.52	104.10	81.22
8.5333	1502.53	104.00	81.32	9.6833	1502.40	104.10	81.12
8.5500	1502.59	104.00	81.29	9.7000	1502.40	104.10	81.05
8.5667	1502.49	104.00	81.30	9.7167	1502.30	104.10	81.00
8.5833	1502.51	104.00	81.28	9.7333	1502.30	104.10	80.93
8.6000	1502.49	104.00	81.23	9.7500	1502.24	104.10	80.88
8.6167	1502.53	104.00	81.25	9.7667	1502.25	104.10	80.77
8.6333	1502.49	104.00	81.30	9.7833	1502.21	104.10	80.79
8.6500	1502.50	104.00	81.35	9.8000	1502.20	104.10	80.80
8.6667	1502.50	104.00	81.34	9.8167	1502.18	104.10	80.78
8.6833	1502.55	104.00	81.34	9.8333	1502.21	104.10	80.75
8.7000	1502.48	104.00	81.35	9.8500	1502.16	104.10	80.79
8.7167	1502.48	104.00	81.32	9.8667	1502.16	104.10	80.80
8.7333	1502.48	104.00	81.31	9.8833	1502.15	104.10	80.87
8.7500	1502.47	104.00	81.26	9.9000	1502.13	104.10	80.86
8.7667	1502.46	104.00	81.22	9.9167	1502.14	104.10	80.85
8.7833	1502.47	104.00	81.14	9.9333	1502.13	104.10	80.83
8.8000	1502.45	104.00	81.16	9.9500	1502.10	104.20	80.84
8.8167	1502.45	104.00	81.13	9.9667	1502.12	104.20	80.85
8.8333	1502.46	104.00	81.09	9.9833	1502.08	104.20	80.85
8.8500	1502.45	104.00	81.13	10.0000	1502.09	104.20	80.82
8.8667	1502.44	104.00	81.17	10.0167	1502.04	104.20	80.84
8.8833	1502.44	104.00	81.21	10.0333	1502.00	104.20	80.80
8.9000	1502.40	104.00	81.24	10.0500	1502.04	104.20	80.78
8.9167	1502.41	104.00	81.25	10.0667	1502.03	104.20	80.72
8.9333	1502.43	104.00	81.26	10.0833	1502.02	104.20	80.68
8.9500	1502.41	104.00	81.25	10.1000	1502.00	104.20	80.65
8.9667	1502.42	104.00	81.24	10.1167	1502.03	104.20	80.65
8.9833	1502.40	104.00	81.20	10.1333	1502.02	104.20	80.69
9.0000	1502.40	104.00	81.20	10.1500	1502.04	104.20	80.66
9.0167	1502.38	104.00	81.08	10.1667	1502.01	104.20	80.61
9.0333	1502.38	104.00	81.02	10.1833	1502.01	104.20	80.57
9.0500	1502.37	104.00	80.91	10.2000	1501.99	104.20	80.50
9.0667	1502.40	104.00	80.88	10.2167	1502.00	104.20	80.49
9.0833	1502.41	104.00	80.88	10.2333	1502.00	104.20	80.49
9.1000	1502.32	104.00	80.90	10.2500	1501.97	104.20	80.51
9.1167	1502.37	104.00	80.86	10.2667	1501.98	104.20	80.60
9.1333	1502.35	104.00	80.78	10.2833	1501.99	104.20	80.67
9.1500	1502.36	104.00	80.79	10.3000	1502.01	104.20	80.66
9.1667	1502.38	104.00	80.79	10.3167	1502.00	104.20	80.67
9.1833	1502.38	104.00	80.90	10.3333	1502.02	104.20	80.66
9.2000	1502.34	104.10	80.89	10.3500	1501.99	104.20	80.65
9.2167	1502.29	104.00	80.73	10.3667	1502.00	104.20	80.55
9.2333	1502.32	104.10	80.71	10.3833	1502.00	104.20	80.53
9.2500	1502.29	104.10	80.71	10.4000	1502.01	104.20	80.53
9.2667	1502.28	104.10	80.72	10.4167	1501.90	104.20	80.58
9.2833	1502.28	104.10	80.67	10.4333	1501.92	104.20	80.59
9.3000	1502.23	104.10	80.56	10.4500	1501.95	104.20	80.56
9.3167	1502.24	104.10	80.52	10.4667	1501.91	104.20	80.55
9.3333	1502.22	104.10	80.43	10.4833	1501.99	104.20	80.52

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
10.5000	1501.92	104.20	80.50	11.6500	1501.70	104.30	80.27
10.5167	1501.97	104.20	80.48	11.6667	1501.69	104.30	80.28
10.5333	1501.91	104.20	80.50	11.6833	1501.68	104.30	80.22
10.5500	1501.96	104.20	80.48	11.7000	1501.68	104.40	80.20
10.5667	1501.92	104.20	80.48	11.7167	1501.67	104.40	80.20
10.5833	1501.91	104.20	80.47	11.7333	1501.66	104.30	80.13
10.6000	1502.00	104.20	80.48	11.7500	1501.66	104.40	80.11
10.6167	1501.91	104.20	80.49	11.7667	1501.72	104.40	80.08
10.6333	1501.87	104.20	80.48	11.7833	1501.57	104.40	80.11
10.6500	1501.95	104.20	80.48	11.8000	1501.57	104.40	80.08
10.6667	1501.88	104.20	80.48	11.8167	1501.61	104.40	80.12
10.6833	1501.87	104.20	80.51	11.8333	1501.62	104.40	80.09
10.7000	1501.90	104.20	80.54	11.8500	1501.61	104.40	80.11
10.7167	1501.90	104.20	80.59	11.8667	1501.60	104.40	80.11
10.7333	1501.92	104.20	80.60	11.8833	1501.61	104.40	80.17
10.7500	1501.91	104.20	80.59	11.9000	1501.61	104.40	80.16
10.7667	1501.92	104.20	80.55	11.9167	1501.61	104.40	80.12
10.7833	1501.93	104.30	80.54	11.9333	1501.60	104.40	80.12
10.8000	1501.93	104.20	80.52	11.9500	1501.61	104.40	80.08
10.8167	1501.87	104.30	80.50	11.9667	1501.60	104.40	80.03
10.8333	1501.88	104.30	80.51	11.9833	1501.57	104.40	80.04
10.8500	1501.87	104.30	80.51	12.0000	1501.59	104.40	80.09
10.8667	1501.87	104.30	80.48	12.0167	1501.59	104.40	80.10
10.8833	1501.87	104.30	80.47	12.0333	1501.57	104.40	80.13
10.9000	1501.87	104.30	80.46	12.0500	1501.57	104.40	80.14
10.9167	1501.82	104.30	80.45	12.0667	1501.57	104.40	80.12
10.9333	1501.83	104.30	80.43	12.0833	1501.56	104.40	80.13
10.9500	1501.81	104.30	80.46	12.1000	1501.58	104.40	80.15
10.9667	1501.81	104.30	80.37	12.1167	1501.57	104.40	80.14
10.9833	1502.00	104.30	80.60	12.1333	1501.57	104.40	80.13
11.0000	1502.06	104.30	80.67	12.1500	1501.56	104.40	80.15
11.0167	1502.10	104.30	80.66	12.1667	1501.55	104.40	80.11
11.0333	1502.06	104.30	80.66	12.1833	1501.55	104.40	80.13
11.0500	1502.01	104.30	80.58	12.2000	1501.54	104.40	80.10
11.0667	1501.97	104.30	80.55	12.2167	1501.52	104.40	80.10
11.0833	1501.99	104.30	80.53	12.2333	1501.53	104.40	80.08
11.1000	1501.93	104.30	80.52	12.2500	1501.52	104.40	80.10
11.1167	1501.94	104.30	80.49	12.2667	1501.52	104.40	80.04
11.1333	1501.91	104.30	80.48	12.2833	1501.52	104.40	80.03
11.1500	1501.87	104.30	80.42	12.3000	1501.52	104.40	80.10
11.1667	1501.83	104.30	80.43	12.3167	1501.51	104.40	80.03
11.1833	1501.82	104.30	80.43	12.3333	1501.52	104.40	79.97
11.2000	1501.81	104.30	80.40	12.3500	1501.52	104.40	79.96
11.2167	1501.87	104.30	80.35	12.3667	1501.50	104.40	79.96
11.2333	1501.82	104.30	80.37	12.3833	1501.51	104.40	79.99
11.2500	1501.79	104.30	80.39	12.4000	1501.49	104.40	79.94
11.2667	1501.80	104.30	80.38	12.4167	1501.47	104.40	79.95
11.2833	1501.75	104.30	80.40	12.4333	1501.49	104.40	79.93
11.3000	1501.76	104.30	80.40	12.4500	1501.47	104.40	79.95
11.3167	1501.74	104.30	80.39	12.4667	1501.47	104.40	79.96
11.3333	1501.77	104.30	80.39	12.4833	1501.47	104.40	79.92
11.3500	1501.76	104.30	80.39	12.5000	1501.46	104.40	79.93
11.3667	1501.74	104.30	80.38	12.5167	1501.48	104.40	79.96
11.3833	1501.74	104.30	80.36	12.5333	1501.45	104.40	79.95
11.4000	1501.75	104.30	80.32	12.5500	1501.45	104.40	79.97
11.4167	1501.72	104.30	80.34	12.5667	1501.46	104.40	79.98
11.4333	1501.72	104.30	80.36	12.5833	1501.42	104.40	79.96
11.4500	1501.73	104.30	80.32	12.6000	1501.46	104.40	79.94
11.4667	1501.73	104.30	80.32	12.6167	1501.39	104.40	79.91
11.4833	1501.72	104.30	80.29	12.6333	1501.43	104.40	79.90
11.5000	1501.77	104.30	80.27	12.6500	1501.41	104.40	79.91
11.5167	1501.68	104.30	80.26	12.6667	1501.39	104.40	79.92
11.5333	1501.71	104.30	80.21	12.6833	1501.42	104.40	79.89
11.5500	1501.67	104.30	80.20	12.7000	1501.40	104.40	79.89
11.5667	1501.69	104.30	80.24	12.7167	1501.39	104.40	79.89
11.5833	1501.69	104.30	80.24	12.7333	1501.40	104.40	79.90
11.6000	1501.72	104.30	80.25	12.7500	1501.30	104.40	79.88
11.6167	1501.70	104.30	80.29	12.7667	1501.39	104.50	79.85
11.6333	1501.71	104.40	80.30	12.7833	1501.39	104.40	79.93

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
12.8000	1501.30	104.40	79.92	13.9500	1501.16	104.50	79.57
12.8167	1501.37	104.50	79.90	13.9667	1501.11	104.60	79.54
12.8333	1501.40	104.50	79.93	13.9833	1501.14	104.60	79.55
12.8500	1501.33	104.50	79.93	14.0000	1501.13	104.60	79.48
12.8667	1501.39	104.50	79.91	14.0167	1500.47	104.60	78.89
12.8833	1501.34	104.50	79.93	14.0333	1500.63	104.60	78.95
12.9000	1501.40	104.50	79.94	14.0500	1500.78	104.60	79.22
12.9167	1501.35	104.50	79.86	14.0667	1500.84	104.60	79.34
12.9333	1501.36	104.50	79.82	14.0833	1500.89	104.60	79.42
12.9500	1501.37	104.50	79.81	14.1000	1500.92	104.60	79.43
12.9667	1501.34	104.50	79.78	14.1167	1500.93	104.60	79.44
12.9833	1501.34	104.50	79.78	14.1333	1500.96	104.60	79.49
13.0000	1501.33	104.50	79.80	14.1500	1500.98	104.60	79.49
13.0167	1501.38	104.50	79.81	14.1667	1501.01	104.60	79.50
13.0333	1501.32	104.50	79.85	14.1833	1501.01	104.60	79.51
13.0500	1501.38	104.50	79.81	14.2000	1501.03	104.60	79.54
13.0667	1501.32	104.50	79.72	14.2167	1501.05	104.60	79.50
13.0833	1501.37	104.50	79.69	14.2333	1501.06	104.60	79.57
13.1000	1501.31	104.50	79.70	14.2500	1501.00	104.60	79.58
13.1167	1501.27	104.50	79.73	14.2667	1501.06	104.60	79.62
13.1333	1501.26	104.50	79.72	14.2833	1501.03	104.60	79.60
13.1500	1501.27	104.50	79.70	14.3000	1501.04	104.60	79.55
13.1667	1501.26	104.50	79.63	14.3167	1501.06	104.60	79.52
13.1833	1501.31	104.50	79.69	14.3333	1501.03	104.60	79.52
13.2000	1501.26	104.50	79.71	14.3500	1501.07	104.60	79.54
13.2167	1501.25	104.50	79.75	14.3667	1501.02	104.60	79.56
13.2333	1501.27	104.50	79.76	14.3833	1501.04	104.60	79.55
13.2500	1501.26	104.50	79.71	14.4000	1501.02	104.60	79.53
13.2667	1501.25	104.50	79.68	14.4167	1501.05	104.60	79.52
13.2833	1501.25	104.50	79.69	14.4333	1501.03	104.60	79.53
13.3000	1501.25	104.50	79.68	14.4500	1501.05	104.60	79.52
13.3167	1501.25	104.50	79.65	14.4667	1501.09	104.60	79.55
13.3333	1501.26	104.50	79.64	14.4833	1501.01	104.60	79.54
13.3500	1501.23	104.50	79.65	14.5000	1501.00	104.60	79.51
13.3667	1501.30	104.50	79.68	14.5167	1501.04	104.60	79.53
13.3833	1501.25	104.50	79.69	14.5333	1501.05	104.60	79.53
13.4000	1501.31	104.50	79.69	14.5500	1501.01	104.60	79.49
13.4167	1501.21	104.50	79.70	14.5667	1500.97	104.60	79.51
13.4333	1501.28	104.50	79.68	14.5833	1501.00	104.60	79.53
13.4500	1501.21	104.50	79.70	14.6000	1501.03	104.60	79.55
13.4667	1501.23	104.50	79.70	14.6167	1501.04	104.60	79.56
13.4833	1501.22	104.50	79.69	14.6333	1501.05	104.60	79.62
13.5000	1501.21	104.50	79.68	14.6500	1501.01	104.60	79.63
13.5167	1501.20	104.50	79.64	14.6667	1501.04	104.60	79.66
13.5333	1501.21	104.50	79.67	14.6833	1501.04	104.60	79.66
13.5500	1501.19	104.50	79.66	14.7000	1501.01	104.60	79.69
13.5667	1501.18	104.50	79.68	14.7167	1501.00	104.60	79.71
13.5833	1501.18	104.50	79.62	14.7333	1501.01	104.60	79.72
13.6000	1501.17	104.50	79.63	14.7500	1500.98	104.60	79.72
13.6167	1501.20	104.50	79.65	14.7667	1501.00	104.60	79.69
13.6333	1501.20	104.50	79.70	14.7833	1501.00	104.60	79.70
13.6500	1501.21	104.50	79.72	14.8000	1500.98	104.60	79.71
13.6667	1501.19	104.50	79.72	14.8167	1501.00	104.60	79.69
13.6833	1501.19	104.50	79.64	14.8333	1501.00	104.60	79.67
13.7000	1501.15	104.50	79.68	14.8500	1501.01	104.60	79.64
13.7167	1501.19	104.50	79.64	14.8667	1501.00	104.60	79.63
13.7333	1501.18	104.50	79.66	14.8833	1501.00	104.60	79.63
13.7500	1501.17	104.50	79.65	14.9000	1501.04	104.60	79.64
13.7667	1501.16	104.50	79.64	14.9167	1501.01	104.60	79.65
13.7833	1501.15	104.50	79.67	14.9333	1501.00	104.60	79.63
13.8000	1501.13	104.50	79.63	14.9500	1501.00	104.60	79.61
13.8167	1501.16	104.50	79.62	14.9667	1501.00	104.60	79.63
13.8333	1501.14	104.50	79.64	14.9833	1500.96	104.60	79.65
13.8500	1501.15	104.50	79.63	15.0000	1501.00	104.60	79.64
13.8667	1501.17	104.50	79.64	15.0167	1500.99	104.60	79.65
13.8833	1501.17	104.50	79.60	15.0333	1500.96	104.60	79.64
13.9000	1501.12	104.50	79.59	15.0500	1501.02	104.60	79.65
13.9167	1501.13	104.50	79.56	15.0667	1500.97	104.60	79.66
13.9333	1501.18	104.50	79.59	15.0833	1501.01	104.60	79.68

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
15.1000	1500.99	104.60	79.69	16.2500	1500.81	104.70	79.19
15.1167	1500.95	104.60	79.69	16.2667	1500.79	104.70	79.20
15.1333	1501.00	104.60	79.68	16.2833	1500.81	104.70	79.17
15.1500	1500.93	104.60	79.67	16.3000	1500.77	104.70	79.14
15.1667	1500.93	104.60	79.67	16.3167	1500.81	104.70	79.29
15.1833	1500.96	104.60	79.63	16.3333	1500.79	104.70	79.30
15.2000	1500.94	104.60	79.60	16.3500	1500.78	104.70	79.29
15.2167	1500.94	104.60	79.58	16.3667	1500.76	104.70	79.30
15.2333	1500.92	104.60	79.57	16.3833	1500.75	104.70	79.25
15.2500	1500.89	104.60	79.56	16.4000	1500.69	104.70	79.15
15.2667	1500.94	104.60	79.57	16.4167	1500.75	104.70	79.13
15.2833	1500.93	104.60	79.57	16.4333	1500.76	104.70	79.10
15.3000	1500.89	104.60	79.54	16.4500	1500.69	104.70	79.12
15.3167	1500.92	104.60	79.57	16.4667	1500.72	104.70	79.16
15.3333	1500.90	104.60	79.59	16.4833	1500.70	104.70	79.11
15.3500	1500.93	104.60	79.59	16.5000	1500.71	104.70	79.08
15.3667	1500.94	104.60	79.58	16.5167	1500.70	104.70	79.07
15.3833	1500.92	104.60	79.58	16.5333	1500.67	104.70	79.14
15.4000	1500.92	104.60	79.58	16.5500	1500.73	104.70	79.22
15.4167	1500.92	104.60	79.57	16.5667	1500.75	104.70	79.23
15.4333	1500.91	104.60	79.58	16.5833	1500.70	104.70	79.21
15.4500	1500.94	104.60	79.60	16.6000	1500.67	104.70	79.29
15.4667	1500.93	104.60	79.62	16.6167	1500.74	104.70	79.28
15.4833	1500.90	104.60	79.63	16.6333	1500.67	104.70	79.25
15.5000	1500.89	104.60	79.64	16.6500	1500.72	104.70	79.27
15.5167	1500.82	104.70	79.64	16.6667	1500.71	104.70	79.23
15.5333	1500.88	104.60	79.62	16.6833	1500.71	104.70	79.19
15.5500	1500.86	104.60	79.63	16.7000	1500.71	104.70	79.00
15.5667	1500.88	104.70	79.59	16.7167	1500.72	104.70	78.78
15.5833	1500.88	104.70	79.54	16.7333	1500.70	104.70	78.68
15.6000	1500.86	104.70	79.50	16.7500	1500.69	104.70	78.73
15.6167	1500.86	104.70	79.51	16.7667	1500.70	104.70	78.88
15.6333	1500.88	104.70	79.49	16.7833	1500.67	104.70	78.95
15.6500	1500.89	104.70	79.49	16.8000	1500.71	104.70	79.00
15.6667	1500.86	104.70	79.48	16.8167	1500.68	104.70	79.06
15.6833	1500.90	104.70	79.51	16.8333	1500.69	104.70	79.17
15.7000	1500.89	104.70	79.50	16.8500	1500.69	104.70	79.22
15.7167	1500.89	104.70	79.52	16.8667	1500.67	104.80	79.23
15.7333	1500.90	104.70	79.51	16.8833	1500.69	104.80	79.23
15.7500	1500.85	104.70	79.54	16.9000	1500.66	104.80	79.19
15.7667	1500.84	104.70	79.56	16.9167	1500.70	104.80	79.12
15.7833	1500.83	104.70	79.51	16.9333	1500.69	104.70	79.10
15.8000	1500.80	104.70	79.48	16.9500	1500.64	104.80	79.14
15.8167	1500.86	104.70	79.45	16.9667	1500.67	104.80	79.15
15.8333	1500.83	104.70	79.47	16.9833	1500.62	104.80	79.10
15.8500	1500.86	104.70	79.45	17.0000	1500.64	104.80	79.10
15.8667	1500.81	104.70	79.46	17.0167	1500.63	104.80	79.07
15.8833	1500.81	104.70	79.45	17.0333	1500.61	104.80	79.12
15.9000	1500.82	104.70	79.52	17.0500	1500.67	104.80	79.12
15.9167	1500.87	104.70	79.58	17.0667	1500.68	104.80	79.12
15.9333	1500.86	104.70	79.42	17.0833	1500.68	104.80	79.14
15.9500	1500.82	104.70	79.38	17.1000	1500.68	104.80	79.13
15.9667	1500.83	104.70	79.36	17.1167	1500.67	104.80	79.13
15.9833	1500.84	104.70	79.32	17.1333	1500.66	104.80	79.15
16.0000	1500.82	104.70	79.32	17.1500	1500.67	104.80	79.18
16.0167	1500.82	104.70	79.44	17.1667	1500.66	104.80	79.15
16.0333	1500.78	104.70	79.44	17.1833	1500.66	104.80	79.09
16.0500	1500.79	104.70	79.40	17.2000	1500.65	104.80	78.95
16.0667	1500.81	104.70	79.42	17.2167	1500.64	104.80	78.89
16.0833	1500.81	104.70	79.40	17.2333	1500.63	104.80	78.79
16.1000	1500.79	104.70	79.37	17.2500	1500.66	104.80	78.76
16.1167	1500.79	104.70	79.34	17.2667	1500.64	104.80	78.63
16.1333	1500.80	104.70	79.30	17.2833	1500.63	104.80	78.57
16.1500	1500.81	104.70	79.28	17.3000	1500.64	104.80	78.63
16.1667	1500.80	104.70	79.27	17.3167	1500.64	104.80	78.63
16.1833	1500.80	104.70	79.21	17.3333	1500.62	104.80	78.58
16.2000	1500.79	104.70	79.17	17.3500	1500.63	104.80	78.62
16.2167	1500.80	104.70	79.17	17.3667	1500.62	104.80	78.70
16.2333	1500.77	104.70	79.18	17.3833	1500.60	104.80	78.79

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
17.4000	1500.61	104.80	78.80	18.5500	1500.46	104.90	78.88
17.4167	1500.60	104.80	78.83	18.5833	1500.43	104.90	78.94
17.4333	1500.60	104.80	78.91	18.6000	1500.46	104.90	78.91
17.4500	1500.59	104.80	78.92	18.6167	1500.42	104.90	78.93
17.4667	1500.57	104.80	78.89	18.6333	1500.43	104.90	78.90
17.4833	1500.58	104.80	78.74	18.6500	1500.44	104.90	78.75
17.5000	1500.64	104.80	78.65	18.6667	1500.45	104.90	78.64
17.5167	1500.66	104.80	78.60	18.6833	1500.43	104.90	78.56
17.5333	1500.57	104.80	78.49	18.7000	1500.44	104.90	78.57
17.5500	1501.13	104.80	79.11	18.7167	1500.43	104.90	78.55
17.5667	1500.99	104.80	79.29	18.7333	1500.43	104.90	78.56
17.5833	1501.00	104.80	79.08	18.7500	1500.43	104.90	78.58
17.6000	1500.96	104.80	78.89	18.7667	1500.43	104.90	78.55
17.6167	1500.85	104.80	78.75	18.7833	1500.44	104.90	78.53
17.6333	1500.84	104.80	78.72	18.8000	1500.43	104.90	78.52
17.6500	1500.82	104.80	78.72	18.8167	1500.43	104.90	78.55
17.6667	1500.80	104.80	78.80	18.8333	1500.43	104.90	78.58
17.6833	1500.75	104.80	78.79	18.8500	1500.43	104.90	78.60
17.7000	1500.73	104.80	78.76	18.8667	1500.44	104.90	78.60
17.7167	1500.71	104.80	78.75	18.8833	1500.46	104.90	78.57
17.7333	1500.73	104.80	78.85	18.9000	1500.46	104.90	78.61
17.7500	1500.66	104.80	78.79	18.9167	1500.44	104.90	78.59
17.7667	1500.68	104.80	78.78	18.9333	1500.44	104.90	78.45
17.7833	1500.62	104.80	78.77	18.9500	1500.46	104.90	78.46
17.8000	1500.61	104.80	78.77	18.9667	1500.44	104.90	78.48
17.8167	1500.62	104.80	78.82	18.9833	1500.45	104.90	78.44
17.8333	1500.59	104.80	78.84	19.0000	1500.44	104.90	78.36
17.8500	1500.59	104.80	78.86	19.0167	1500.44	104.90	78.33
17.8667	1500.57	104.80	78.90	19.0333	1500.42	104.90	78.28
17.8833	1500.60	104.80	78.89	19.0500	1500.42	104.90	78.28
17.9000	1500.62	104.80	78.82	19.0667	1500.43	104.90	78.36
17.9167	1500.62	104.80	78.81	19.0833	1500.41	104.90	78.42
17.9333	1500.62	104.80	78.80	19.1000	1500.44	104.90	78.44
17.9500	1500.63	104.80	78.81	19.1167	1500.45	104.90	78.45
17.9667	1500.60	104.80	78.77	19.1333	1500.45	104.90	78.49
17.9833	1500.61	104.80	78.76	19.1500	1500.44	104.90	78.52
18.0000	1500.55	104.80	78.74	19.1667	1500.42	104.90	78.51
18.0167	1500.56	104.80	78.73	19.1833	1500.45	104.90	78.46
18.0333	1500.56	104.80	78.73	19.2000	1500.41	104.90	78.51
18.0500	1500.53	104.80	78.73	19.2167	1500.39	104.90	78.54
18.0667	1500.54	104.80	78.76	19.2333	1500.41	104.90	78.58
18.0833	1500.54	104.80	78.78	19.2500	1500.44	104.90	78.63
18.1000	1500.53	104.80	78.79	19.2667	1500.40	104.90	78.68
18.1167	1500.51	104.80	78.81	19.2833	1500.41	104.90	78.65
18.1333	1500.57	104.90	78.83	19.3000	1500.41	104.90	78.58
18.1500	1500.51	104.90	78.84	19.3167	1500.41	104.90	78.54
18.1667	1500.58	104.90	78.84	19.3333	1500.40	104.90	78.43
18.1833	1500.55	104.90	78.84	19.3500	1500.39	104.90	78.37
18.2000	1500.53	104.80	78.82	19.3667	1500.38	104.90	78.47
18.2167	1500.53	104.90	78.83	19.3833	1500.43	104.90	78.46
18.2333	1500.54	104.90	78.83	19.4000	1500.40	104.90	78.50
18.2500	1500.51	104.90	78.84	19.4167	1500.43	104.90	78.48
18.2667	1500.51	104.90	78.82	19.4333	1500.44	104.90	78.44
18.2833	1500.48	104.90	78.80	19.4500	1500.45	104.90	78.40
18.3000	1500.52	104.90	78.84	19.4667	1500.44	104.90	78.45
18.3167	1500.53	104.90	78.84	19.4833	1500.43	104.90	78.42
18.3333	1500.51	104.90	78.85	19.5000	1500.41	105.00	78.46
18.3500	1500.50	104.90	78.84	19.5167	1500.43	104.90	78.48
18.3667	1500.47	104.90	78.82	19.5333	1500.39	105.00	78.41
18.3833	1500.49	104.90	78.79	19.5500	1500.37	104.90	78.36
18.4000	1500.49	104.90	78.80	19.5667	1500.40	105.00	78.30
18.4167	1500.45	104.90	78.78	19.5833	1500.41	105.00	78.26
18.4333	1500.46	104.90	78.71	19.6000	1500.42	105.00	78.22
18.4500	1500.45	104.90	78.70	19.6167	1500.42	105.00	78.17
18.4667	1500.46	104.90	78.67	19.6333	1500.37	105.00	78.17
18.4833	1500.47	104.90	78.74	19.6500	1500.40	105.00	78.19
18.5000	1500.46	104.90	78.75	19.6667	1500.40	105.00	78.21
18.5167	1500.44	104.90	78.81	19.6833	1500.34	105.00	78.25
18.5333	1500.45	104.90	78.87	19.7000	1500.41	105.00	78.31

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
19.7167	1500.39	105.00	78.38	20.8667	1500.31	105.00	78.37
19.7333	1500.37	105.00	78.36	20.8833	1500.32	105.00	78.23
19.7500	1500.40	105.00	78.34	20.9000	1500.31	105.00	78.15
19.7667	1500.39	105.00	78.28	20.9167	1500.30	105.00	78.17
19.7833	1500.40	105.00	78.20	20.9333	1500.34	105.00	78.21
19.8000	1500.35	105.00	78.18	20.9500	1500.30	105.00	78.22
19.8167	1500.38	105.00	78.19	20.9667	1500.28	105.00	78.22
19.8333	1500.37	105.00	78.15	20.9833	1500.34	105.00	78.25
19.8500	1500.37	105.00	78.15	21.0000	1500.29	105.00	78.24
19.8667	1500.38	105.00	78.18	21.0167	1500.31	105.00	78.21
19.8833	1500.35	105.00	78.17	21.0333	1500.30	105.00	78.16
19.9000	1500.34	105.00	78.21	21.0500	1500.25	105.00	78.13
19.9167	1500.38	105.00	78.27	21.0667	1500.30	105.00	78.21
19.9333	1500.36	105.00	78.27	21.0833	1500.30	105.00	78.23
19.9500	1500.34	105.00	78.25	21.1000	1500.30	105.00	78.24
19.9667	1500.37	105.00	78.19	21.1167	1500.31	105.10	78.21
19.9833	1500.34	105.00	78.18	21.1333	1500.25	105.00	78.24
20.0000	1500.32	105.00	78.21	21.1500	1500.30	105.10	78.32
20.0167	1500.34	105.00	78.19	21.1667	1500.31	105.10	78.37
20.0333	1500.32	105.00	78.15	21.1833	1500.30	105.10	78.51
20.0500	1500.33	105.00	78.12	21.2000	1500.24	105.00	78.39
20.0667	1500.35	105.00	78.10	21.2167	1500.30	105.10	78.34
20.0833	1500.32	105.00	78.08	21.2333	1500.30	105.10	78.25
20.1000	1500.38	105.00	78.05	21.2500	1500.31	105.10	78.12
20.1167	1500.31	105.00	77.99	21.2667	1500.29	105.10	78.09
20.1333	1500.38	105.00	78.06	21.2833	1500.29	105.10	78.17
20.1500	1500.35	105.00	78.15	21.3000	1500.30	105.10	78.27
20.1667	1500.34	105.00	78.14	21.3167	1500.29	105.10	78.40
20.1833	1500.37	105.00	78.16	21.3333	1500.31	105.10	78.40
20.2000	1500.33	105.00	78.17	21.3500	1500.29	105.10	78.38
20.2167	1500.36	105.00	78.21	21.3667	1500.30	105.10	78.37
20.2333	1500.37	105.00	78.23	21.3833	1500.29	105.10	78.35
20.2500	1500.26	105.00	78.30	21.4000	1500.27	105.10	78.36
20.2667	1500.29	105.00	78.45	21.4167	1500.23	105.10	78.42
20.2833	1500.34	105.00	78.47	21.4333	1500.31	105.10	78.41
20.3000	1500.31	105.00	78.35	21.4500	1500.31	105.10	78.38
20.3167	1500.31	105.00	78.33	21.4667	1500.28	105.10	78.47
20.3333	1500.29	105.00	78.31	21.4833	1500.25	105.10	78.42
20.3500	1500.32	105.00	78.26	21.5000	1500.26	105.10	78.34
20.3667	1500.29	105.00	78.16	21.5167	1500.22	105.10	78.55
20.3833	1500.29	105.00	78.08	21.5333	1500.26	105.10	78.77
20.4000	1500.30	105.00	78.07	21.5500	1500.30	105.10	78.65
20.4167	1500.28	105.00	78.00	21.5667	1500.26	105.10	78.47
20.4333	1500.29	105.00	78.01	21.5833	1500.27	105.10	78.43
20.4500	1500.29	105.00	77.99	21.6000	1500.28	105.10	78.30
20.4667	1500.28	105.00	78.02	21.6167	1500.33	105.10	78.05
20.4833	1500.32	105.00	78.05	21.6333	1500.31	105.10	77.98
20.5000	1500.32	105.00	78.12	21.6500	1500.33	105.10	77.97
20.5167	1500.32	105.00	78.19	21.6667	1500.29	105.10	78.23
20.5333	1500.36	105.00	78.19	21.6833	1500.26	105.10	78.39
20.5500	1500.30	105.00	78.22	21.7000	1500.32	105.10	78.44
20.5667	1500.29	105.00	78.21	21.7167	1500.32	105.10	78.47
20.5833	1500.37	105.00	78.19	21.7333	1500.33	105.10	78.53
20.6000	1500.29	105.00	78.20	21.7500	1500.34	105.10	78.61
20.6167	1500.33	105.00	78.21	21.7667	1500.34	105.10	78.65
20.6333	1500.28	105.00	78.20	21.7833	1500.34	105.10	78.33
20.6500	1500.31	105.00	78.14	21.8000	1500.31	105.10	78.20
20.6667	1500.24	105.00	78.13	21.8167	1500.31	105.10	78.05
20.6833	1500.29	105.00	78.16	21.8333	1500.30	105.10	77.97
20.7000	1500.30	105.00	78.13	21.8500	1500.29	105.10	78.14
20.7167	1500.25	105.00	78.10	21.8667	1500.31	105.10	78.09
20.7333	1500.26	105.00	78.10	21.8833	1500.27	105.10	78.17
20.7500	1500.32	105.00	78.16	21.9000	1500.25	105.10	78.28
20.7667	1500.32	105.00	78.23	21.9167	1500.26	105.10	78.26
20.7833	1500.30	105.00	78.29	21.9333	1500.27	105.10	78.31
20.8000	1500.26	105.00	78.33	21.9500	1500.27	105.10	78.30
20.8167	1500.30	105.00	78.26	21.9667	1500.26	105.10	78.23
20.8333	1500.31	105.00	78.34	21.9833	1500.26	105.10	78.13
20.8500	1500.32	105.00	78.41	22.0000	1500.26	105.10	78.18

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
22.0167	1500.26	105.10	78.26	23.1667	1500.18	105.20	79.07
22.0333	1500.24	105.10	78.24	23.1833	1500.20	105.20	79.05
22.0500	1500.27	105.10	78.33	23.2000	1500.16	105.20	79.02
22.0667	1500.26	105.10	78.19	23.2167	1500.18	105.20	79.00
22.0833	1500.23	105.10	78.08	23.2333	1500.19	105.20	78.85
22.1000	1500.22	105.10	78.02	23.2500	1500.22	105.20	78.66
22.1167	1500.24	105.10	78.03	23.2667	1500.18	105.20	78.51
22.1333	1500.21	105.10	78.03	23.2833	1500.22	105.20	78.60
22.1500	1500.20	105.10	78.11	23.3000	1500.13	105.20	78.72
22.1667	1500.23	105.10	78.32	23.3167	1500.17	105.20	78.86
22.1833	1500.21	105.10	78.34	23.3333	1500.13	105.20	79.11
22.2000	1500.20	105.10	78.35	23.3500	1500.19	105.20	79.06
22.2167	1500.19	105.10	78.24	23.3667	1500.17	105.20	78.57
22.2333	1500.20	105.10	78.17	23.3833	1500.13	105.20	78.25
22.2500	1500.19	105.10	78.28	23.4000	1500.22	105.20	78.12
22.2667	1500.20	105.10	78.32	23.4167	1500.23	105.20	78.11
22.2833	1500.20	105.10	78.37	23.4333	1500.22	105.20	78.32
22.3000	1500.23	105.10	78.43	23.4500	1500.22	105.20	78.36
22.3167	1500.24	105.10	78.52	23.4667	1500.20	105.20	78.55
22.3333	1500.19	105.10	78.68	23.4833	1500.21	105.20	78.93
22.3500	1500.17	105.10	78.64	23.5000	1500.21	105.20	79.06
22.3667	1500.20	105.10	78.56	23.5167	1500.19	105.20	79.04
22.3833	1500.17	105.10	78.54	23.5333	1500.18	105.20	78.98
22.4000	1500.20	105.10	78.61	23.5500	1500.21	105.20	78.82
22.4167	1500.21	105.10	78.54	23.5667	1500.20	105.20	78.66
22.4333	1500.22	105.10	78.51	23.5833	1500.15	105.20	78.42
22.4500	1500.22	105.10	78.51	23.6000	1500.14	105.20	78.38
22.4667	1500.23	105.10	78.40	23.6167	1500.15	105.20	78.36
22.4833	1500.23	105.10	78.28	23.6333	1500.11	105.20	78.29
22.5000	1500.23	105.10	78.47	23.6500	1500.14	105.20	77.95
22.5167	1500.23	105.10	78.71	23.6667	1500.14	105.20	77.77
22.5333	1500.25	105.10	78.61	23.6833	1500.15	105.20	77.67
22.5500	1500.20	105.10	78.46	23.7000	1500.12	105.20	77.70
22.5667	1500.22	105.10	78.44	23.7167	1500.13	105.20	77.69
22.5833	1500.21	105.10	78.43	23.7333	1500.10	105.20	77.73
22.6000	1500.22	105.10	78.37	23.7500	1500.12	105.20	77.70
22.6167	1500.21	105.10	78.31	23.7667	1500.14	105.20	77.77
22.6333	1500.23	105.10	78.34	23.7833	1500.14	105.20	77.81
22.6500	1500.24	105.10	78.48	23.8000	1500.13	105.20	78.02
22.6667	1500.22	105.10	78.53	23.8167	1500.12	105.20	78.29
22.6833	1500.23	105.10	78.45	23.8333	1500.12	105.20	78.75
22.7000	1500.22	105.10	78.36	23.8500	1500.10	105.20	78.94
22.7167	1500.22	105.10	78.32	23.8667	1500.14	105.20	78.66
22.7333	1500.18	105.10	78.29	23.8833	1500.09	105.20	78.71
22.7500	1500.22	105.10	78.29	23.9000	1500.08	105.20	78.38
22.7667	1500.22	105.10	78.43	23.9167	1500.13	105.20	78.09
22.7833	1500.24	105.10	78.42	23.9333	1500.10	105.20	77.97
22.8000	1500.26	105.10	78.43	23.9500	1500.08	105.20	78.02
22.8167	1500.19	105.10	78.35	23.9667	1500.12	105.20	78.13
22.8333	1500.17	105.10	78.28	23.9833	1500.09	105.20	78.20
22.8500	1500.15	105.10	78.23	24.0000	1500.10	105.20	78.27
22.8667	1500.16	105.10	78.25	24.0167	1500.11	105.20	78.44
22.8833	1500.15	105.10	78.28	24.0333	1500.11	105.20	78.55
22.9000	1500.17	105.20	78.28	24.0500	1500.12	105.20	78.61
22.9167	1500.14	105.10	78.26	24.0667	1500.08	105.20	78.50
22.9333	1500.16	105.10	78.28	24.0833	1500.11	105.20	78.41
22.9500	1500.15	105.10	78.26	24.1000	1500.11	105.20	78.34
22.9667	1500.16	105.20	78.29	24.1167	1500.12	105.20	78.02
22.9833	1500.19	105.10	78.34	24.1333	1500.11	105.20	77.84
23.0000	1500.13	105.20	78.41	24.1500	1500.10	105.20	78.03
23.0167	1500.20	105.20	78.56	24.1667	1500.11	105.20	78.13
23.0333	1500.19	105.20	78.70	24.1833	1500.10	105.20	78.23
23.0500	1500.22	105.20	78.78	24.2000	1500.12	105.20	78.24
23.0667	1500.17	105.20	78.81	24.2167	1500.10	105.20	78.25
23.0833	1500.20	105.20	78.66	24.2333	1500.11	105.20	78.16
23.1000	1500.16	105.20	78.58	24.2500	1500.12	105.20	78.07
23.1167	1500.19	105.20	78.58	24.2667	1500.10	105.20	77.97
23.1333	1500.19	105.20	78.64	24.2833	1500.07	105.20	77.91
23.1500	1500.19	105.20	78.86	24.3000	1500.11	105.20	77.97

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
24.3167	1500.08	105.20	78.10	25.4667	1499.97	105.30	78.27
24.3333	1500.07	105.20	78.31	25.4833	1499.97	105.30	78.33
24.3500	1500.06	105.20	78.22	25.5000	1499.97	105.30	78.33
24.3667	1500.08	105.20	78.20	25.5167	1499.98	105.30	78.37
24.3833	1500.09	105.20	78.02	25.5333	1499.99	105.30	78.41
24.4000	1500.10	105.20	78.00	25.5500	1499.96	105.30	78.62
24.4167	1500.04	105.20	77.95	25.5667	1499.95	105.30	78.85
24.4333	1500.04	105.20	78.01	25.5833	1499.98	105.30	78.64
24.4500	1500.03	105.20	78.13	25.6000	1499.95	105.30	78.69
24.4667	1500.02	105.20	78.31	25.6167	1499.97	105.30	78.56
24.4833	1500.05	105.20	78.32	25.6333	1499.95	105.30	78.18
24.5000	1500.01	105.20	78.52	25.6500	1499.97	105.30	77.91
24.5167	1500.03	105.20	78.79	25.6667	1499.94	105.30	77.66
24.5333	1500.08	105.20	78.64	25.6833	1499.94	105.30	77.70
24.5500	1500.07	105.20	78.62	25.7000	1499.96	105.30	77.84
24.5667	1500.04	105.20	78.64	25.7167	1499.95	105.30	78.00
24.5833	1500.06	105.20	79.11	25.7333	1499.95	105.30	77.79
24.6000	1500.06	105.20	78.74	25.7500	1499.97	105.30	77.67
24.6167	1500.07	105.20	78.47	25.7667	1499.98	105.30	77.63
24.6333	1500.10	105.20	78.33	25.7833	1499.97	105.30	77.70
24.6500	1500.10	105.20	77.83	25.8000	1499.98	105.30	77.69
24.6667	1500.09	105.20	77.43	25.8167	1499.93	105.30	77.69
24.6833	1500.07	105.30	77.37	25.8333	1499.98	105.30	77.77
24.7000	1500.09	105.20	77.51	25.8500	1499.94	105.30	77.96
24.7167	1500.05	105.20	77.58	25.8667	1499.96	105.30	78.11
24.7333	1500.05	105.30	77.94	25.8833	1499.94	105.30	78.08
24.7500	1500.10	105.30	78.16	25.9000	1499.95	105.30	77.85
24.7667	1500.06	105.30	78.70	25.9167	1499.93	105.30	77.99
24.7833	1500.06	105.30	78.96	25.9333	1499.91	105.30	78.06
24.8000	1500.05	105.30	78.73	25.9500	1499.92	105.30	78.10
24.8167	1500.10	105.30	78.52	25.9667	1499.92	105.30	78.36
24.8333	1500.09	105.30	78.24	25.9833	1499.91	105.30	78.59
24.8500	1500.09	105.30	78.62	26.0000	1499.91	105.30	78.17
24.8667	1500.08	105.30	78.32	26.0167	1499.98	105.30	77.87
24.8833	1500.10	105.30	77.90	26.0333	1499.91	105.30	77.77
24.9000	1500.08	105.30	77.48	26.0500	1499.90	105.30	78.03
24.9167	1500.10	105.30	77.23	26.0667	1499.91	105.30	78.02
24.9333	1500.08	105.30	76.76	26.0833	1499.90	105.30	78.09
24.9500	1500.09	105.30	76.68	26.1000	1499.91	105.30	78.13
24.9667	1500.05	105.30	76.78	26.1167	1499.91	105.30	78.04
24.9833	1500.08	105.30	77.02	26.1333	1499.98	105.30	78.38
25.0000	1500.09	105.30	77.58	26.1500	1499.92	105.30	78.50
25.0167	1500.11	105.30	78.13	26.1667	1499.88	105.30	78.20
25.0333	1500.10	105.30	78.16	26.1833	1499.86	105.30	77.89
25.0500	1500.11	105.30	78.19	26.2000	1499.90	105.30	77.79
25.0667	1500.07	105.30	77.88	26.2167	1499.92	105.30	77.72
25.0833	1500.08	105.30	77.82	26.2333	1499.85	105.30	77.60
25.1000	1500.07	105.30	77.75	26.2500	1499.88	105.30	77.68
25.1167	1500.08	105.30	77.62	26.2667	1499.88	105.30	77.96
25.1333	1500.10	105.30	77.69	26.2833	1499.87	105.30	78.04
25.1500	1500.05	105.30	77.52	26.3000	1499.89	105.30	78.14
25.1667	1500.05	105.30	77.40	26.3167	1499.82	105.30	78.16
25.1833	1500.00	105.30	77.41	26.3333	1499.89	105.30	78.21
25.2000	1500.01	105.30	77.44	26.3500	1499.86	105.30	78.22
25.2167	1500.00	105.30	77.61	26.3667	1499.83	105.30	78.13
25.2333	1500.02	105.30	77.85	26.3833	1499.85	105.30	78.08
25.2500	1500.00	105.30	77.88	26.4000	1499.84	105.30	78.18
25.2667	1500.00	105.30	77.76	26.4167	1499.85	105.30	78.40
25.2833	1500.01	105.30	77.74	26.4333	1499.85	105.30	78.28
25.3000	1499.98	105.30	77.79	26.4500	1499.85	105.30	78.17
25.3167	1500.00	105.30	77.84	26.4667	1499.83	105.30	78.40
25.3333	1500.00	105.30	78.16	26.4833	1499.87	105.30	78.55
25.3500	1499.97	105.30	78.38	26.5000	1499.85	105.30	78.27
25.3667	1499.98	105.30	78.27	26.5167	1499.84	105.30	78.43
25.3833	1500.00	105.30	78.14	26.5333	1499.88	105.30	79.25
25.4000	1499.99	105.30	78.13	26.5500	1499.87	105.30	79.45
25.4167	1499.99	105.30	78.14	26.5667	1499.88	105.30	79.28
25.4333	1500.00	105.30	78.11	26.5833	1499.95	105.30	78.37
25.4500	1499.99	105.30	78.13	26.6000	1499.97	105.30	77.78

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
26.6167	1499.91	105.30	77.35	27.7667	1499.78	105.40	79.11
26.6333	1499.92	105.40	77.49	27.7833	1499.78	105.40	78.78
26.6500	1499.89	105.30	77.57	27.8000	1499.78	105.40	77.96
26.6667	1499.89	105.30	77.94	27.8167	1499.84	105.40	77.83
26.6833	1499.90	105.30	78.04	27.8333	1499.75	105.40	77.89
26.7000	1499.89	105.40	78.46	27.8500	1499.83	105.40	78.36
26.7167	1499.89	105.40	78.65	27.8667	1499.76	105.40	79.09
26.7333	1499.90	105.40	78.66	27.8833	1499.74	105.40	79.44
26.7500	1499.84	105.40	78.67	27.9000	1499.81	105.40	79.16
26.7667	1499.88	105.40	78.58	27.9167	1499.73	105.40	78.53
26.7833	1499.82	105.40	78.62	27.9333	1499.75	105.40	78.10
26.8000	1499.81	105.40	78.68	27.9500	1499.81	105.40	77.99
26.8167	1499.85	105.40	78.75	27.9667	1499.78	105.40	78.00
26.8333	1499.82	105.40	78.76	27.9833	1499.78	105.40	78.22
26.8500	1499.80	105.40	78.52	28.0000	1499.69	105.40	78.42
26.8667	1499.82	105.40	78.57	28.0167	1499.68	105.40	78.43
26.8833	1499.82	105.40	78.65	28.0333	1499.77	105.40	78.44
26.9000	1499.80	105.40	78.50	28.0500	1499.66	105.40	78.41
26.9167	1499.81	105.40	78.44	28.0667	1499.67	105.40	78.43
26.9333	1499.82	105.40	78.43	28.0833	1499.64	105.40	78.48
26.9500	1499.85	105.40	78.47	28.1000	1499.68	105.40	78.60
26.9667	1499.81	105.40	78.65	28.1167	1499.67	105.40	78.77
26.9833	1499.82	105.40	78.85	28.1333	1499.61	105.40	78.88
27.0000	1499.85	105.40	78.96	28.1500	1499.66	105.40	78.94
27.0167	1499.79	105.40	78.77	28.1667	1499.66	105.40	78.91
27.0333	1499.77	105.40	78.71	28.1833	1499.66	105.40	78.79
27.0500	1499.79	105.40	78.84	28.2000	1499.64	105.40	78.70
27.0667	1499.83	105.40	78.73	28.2167	1499.64	105.40	78.81
27.0833	1499.82	105.40	78.61	28.2333	1499.64	105.40	78.94
27.1000	1499.79	105.40	78.72	28.2500	1499.65	105.40	78.98
27.1167	1499.77	105.40	78.82	28.2667	1499.63	105.40	79.09
27.1333	1499.76	105.40	79.12	28.2833	1499.62	105.40	79.26
27.1500	1499.81	105.40	79.22	28.3000	1499.63	105.40	79.29
27.1667	1499.78	105.40	79.27	28.3167	1499.64	105.40	79.48
27.1833	1499.77	105.40	79.33	28.3333	1499.64	105.40	79.53
27.2000	1499.76	105.40	79.57	28.3500	1499.64	105.40	79.59
27.2167	1499.81	105.40	79.75	28.3667	1499.61	105.40	79.55
27.2333	1499.77	105.40	79.50	28.3833	1499.65	105.40	79.46
27.2500	1499.85	105.40	79.36	28.4000	1499.62	105.40	79.34
27.2667	1499.83	105.40	79.53	28.4167	1499.60	105.40	79.15
27.2833	1499.79	105.40	79.11	28.4333	1499.64	105.40	79.09
27.3000	1499.83	105.40	78.93	28.4500	1499.60	105.40	79.06
27.3167	1499.84	105.40	79.02	28.4667	1499.60	105.40	78.97
27.3333	1499.87	105.40	79.02	28.4833	1499.62	105.40	78.90
27.3500	1499.83	105.40	79.09	28.5000	1499.65	105.40	78.94
27.3667	1499.89	105.40	78.77	28.5167	1499.65	105.40	78.97
27.3833	1499.86	105.40	78.35	28.5333	1499.61	105.40	79.05
27.4000	1499.87	105.40	78.19	28.5500	1499.61	105.40	79.03
27.4167	1499.89	105.40	78.16	28.5667	1499.65	105.40	78.95
27.4333	1499.82	105.40	78.04	28.5833	1499.61	105.40	79.04
27.4500	1499.82	105.40	78.05	28.6000	1499.64	105.40	79.15
27.4667	1499.85	105.40	78.29	28.6167	1499.64	105.40	79.28
27.4833	1499.86	105.40	78.42	28.6333	1499.61	105.40	79.12
27.5000	1499.85	105.40	78.30	28.6500	1499.60	105.50	79.01
27.5167	1499.84	105.40	78.29	28.6667	1499.59	105.40	78.95
27.5333	1499.85	105.40	78.27	28.6833	1499.60	105.40	78.93
27.5500	1499.83	105.40	78.08	28.7000	1499.60	105.50	78.87
27.5667	1499.82	105.40	77.79	28.7167	1499.58	105.50	78.71
27.5833	1499.83	105.40	77.68	28.7333	1499.56	105.50	78.62
27.6000	1499.81	105.40	77.74	28.7500	1499.55	105.50	78.69
27.6167	1499.78	105.40	77.83	28.7667	1499.55	105.50	78.81
27.6333	1499.80	105.40	77.98	28.7833	1499.54	105.50	78.78
27.6500	1499.79	105.40	78.44	28.8000	1499.54	105.50	78.80
27.6667	1499.79	105.40	77.94	28.8167	1499.55	105.50	78.86
27.6833	1499.78	105.40	78.19	28.8333	1499.55	105.50	78.94
27.7000	1499.78	105.40	78.15	28.8500	1499.56	105.50	78.89
27.7167	1499.77	105.40	78.24	28.8667	1499.56	105.50	78.90
27.7333	1499.75	105.40	78.53	28.8833	1499.57	105.50	78.97
27.7500	1499.76	105.40	78.78	28.9000	1499.58	105.50	78.91

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
28.9167	1499.51	105.50	78.90	30.0667	1499.36	105.50	78.51
28.9333	1499.56	105.50	79.07	30.0833	1499.37	105.50	78.49
28.9500	1499.53	105.50	79.10	30.1000	1499.38	105.50	78.48
28.9667	1499.52	105.50	79.12	30.1167	1499.35	105.50	78.49
28.9833	1499.54	105.50	79.12	30.1333	1499.35	105.50	78.50
29.0000	1499.56	105.50	79.08	30.1500	1499.38	105.50	78.50
29.0167	1499.59	105.50	78.97	30.1667	1499.34	105.50	78.46
29.0333	1499.57	105.50	78.93	30.1833	1499.38	105.50	78.42
29.0500	1499.52	105.50	78.94	30.2000	1499.35	105.50	78.45
29.0667	1499.52	105.50	78.89	30.2167	1499.32	105.50	78.46
29.0833	1499.49	105.50	78.81	30.2333	1499.30	105.50	78.45
29.1000	1499.52	105.50	78.76	30.2500	1499.36	105.50	78.46
29.1167	1499.50	105.50	78.78	30.2667	1499.34	105.50	78.47
29.1333	1499.58	105.50	78.75	30.2833	1499.37	105.50	78.49
29.1500	1499.48	105.50	78.78	30.3000	1499.37	105.50	78.53
29.1667	1499.53	105.50	78.82	30.3167	1499.36	105.50	78.52
29.1833	1499.55	105.50	78.86	30.3333	1499.34	105.50	78.48
29.2000	1499.51	105.50	78.88	30.3500	1499.33	105.50	78.47
29.2167	1499.50	105.50	78.92	30.3667	1499.36	105.50	78.45
29.2333	1499.51	105.50	78.96	30.3833	1499.33	105.50	78.45
29.2500	1499.49	105.50	78.91	30.4000	1499.33	105.50	78.39
29.2667	1499.51	105.50	78.89	30.4167	1499.33	105.50	78.41
29.2833	1499.50	105.50	78.88	30.4333	1499.30	105.50	78.44
29.3000	1499.51	105.50	78.89	30.4500	1499.31	105.50	78.49
29.3167	1499.57	105.50	78.87	30.4667	1499.31	105.50	78.50
29.3333	1499.50	105.50	78.83	30.4833	1499.31	105.50	78.50
29.3500	1499.51	105.50	78.75	30.5000	1499.32	105.50	78.47
29.3667	1499.51	105.50	78.71	30.5167	1499.30	105.50	78.48
29.3833	1499.49	105.50	78.67	30.5333	1499.31	105.50	78.48
29.4000	1499.56	105.50	78.64	30.5500	1499.31	105.50	78.51
29.4167	1499.54	105.50	78.69	30.5667	1499.31	105.50	78.52
29.4333	1499.51	105.50	78.74	30.5833	1499.31	105.50	78.51
29.4500	1499.51	105.50	78.77	30.6000	1499.36	105.50	78.51
29.4667	1499.54	105.50	78.82	30.6167	1499.32	105.50	78.51
29.4833	1499.49	105.50	78.87	30.6333	1499.31	105.50	78.51
29.5000	1499.51	105.50	78.91	30.6500	1499.34	105.50	78.53
29.5167	1499.50	105.50	78.88	30.6667	1499.37	105.60	78.48
29.5333	1499.47	105.50	78.86	30.6833	1499.36	105.50	78.48
29.5500	1499.50	105.50	78.86	30.7000	1499.36	105.50	78.48
29.5667	1499.48	105.50	78.84	30.7167	1499.30	105.60	78.49
29.5833	1499.49	105.50	78.84	30.7333	1499.34	105.50	78.45
29.6000	1499.48	105.50	78.80	30.7500	1499.38	105.50	78.45
29.6167	1499.47	105.50	78.72	30.7667	1499.30	105.60	78.52
29.6333	1499.45	105.50	78.73	30.7833	1499.29	105.60	78.49
29.6500	1499.45	105.50	78.73	30.8000	1499.34	105.50	78.50
29.6667	1499.42	105.50	78.71	30.8167	1499.29	105.60	78.48
29.6833	1499.43	105.50	78.67	30.8333	1499.28	105.60	78.51
29.7000	1499.43	105.50	78.67	30.8500	1499.36	105.60	78.50
29.7167	1499.41	105.50	78.63	30.8667	1499.30	105.60	78.47
29.7333	1499.42	105.50	78.60	30.8833	1499.33	105.60	78.41
29.7500	1499.45	105.50	78.56	30.9000	1499.31	105.60	78.41
29.7667	1499.44	105.50	78.55	30.9167	1499.35	105.60	78.35
29.7833	1499.42	105.50	78.60	30.9333	1499.32	105.60	78.31
29.8000	1499.40	105.50	78.68	30.9500	1499.32	105.60	78.30
29.8167	1499.46	105.50	78.62	30.9667	1499.32	105.60	78.30
29.8333	1499.42	105.50	78.64	30.9833	1499.31	105.60	78.28
29.8500	1499.39	105.50	78.62	31.0000	1499.30	105.60	78.28
29.8667	1499.46	105.50	78.63	31.0167	1499.26	105.60	78.26
29.8833	1499.41	105.50	78.63	31.0333	1499.27	105.60	78.22
29.9000	1499.40	105.50	78.62	31.0500	1499.25	105.60	78.16
29.9167	1499.41	105.50	78.64	31.0833	1499.33	105.60	78.14
29.9333	1499.44	105.50	78.61	31.1000	1499.33	105.60	78.15
29.9500	1499.39	105.50	78.64	31.1167	1499.31	105.60	78.12
29.9667	1499.41	105.50	78.65	31.1333	1499.32	105.60	78.17
29.9833	1499.37	105.50	78.64	31.1500	1499.27	105.60	78.19
30.0000	1499.37	105.50	78.62	31.1667	1499.33	105.60	78.20
30.0167	1499.38	105.50	78.61	31.1833	1499.33	105.60	78.22
30.0333	1499.38	105.50	78.57	31.2000	1499.32	105.60	78.20
30.0500	1499.37	105.50	78.53	31.2167	1499.30	105.60	78.19

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
31.2333	1499.32	105.60	78.20	32.4000	1499.23	105.60	77.68
31.2500	1499.27	105.60	78.22	32.4167	1499.25	105.60	77.70
31.2667	1499.29	105.60	78.21	32.4333	1499.24	105.60	77.72
31.2833	1499.29	105.60	78.20	32.4500	1499.23	105.60	77.74
31.3000	1499.28	105.60	78.18	32.4667	1499.24	105.60	77.76
31.3167	1499.30	105.60	78.19	32.4833	1499.22	105.60	77.80
31.3333	1499.30	105.60	78.13	32.5000	1499.23	105.60	77.81
31.3500	1499.30	105.60	78.08	32.5167	1499.22	105.60	77.80
31.3667	1499.30	105.60	78.05	32.5333	1499.23	105.60	77.81
31.3833	1499.31	105.60	78.04	32.5500	1499.22	105.60	77.82
31.4000	1499.29	105.60	78.01	32.5667	1499.21	105.60	77.86
31.4167	1499.28	105.60	77.97	32.5833	1499.18	105.60	77.87
31.4333	1499.28	105.60	77.96	32.6000	1499.19	105.60	77.89
31.4500	1499.32	105.60	77.96	32.6167	1499.19	105.60	77.87
31.4667	1499.29	105.60	77.98	32.6333	1499.23	105.60	77.84
31.4833	1499.29	105.60	78.04	32.6500	1499.18	105.60	77.81
31.5000	1499.29	105.60	78.07	32.6667	1499.23	105.60	77.75
31.5167	1499.30	105.60	78.09	32.6833	1499.19	105.60	77.76
31.5333	1499.31	105.60	78.13	32.7000	1499.21	105.60	77.73
31.5500	1499.30	105.60	78.04	32.7167	1499.19	105.60	77.76
31.5667	1499.29	105.60	78.03	32.7333	1499.19	105.60	77.75
31.5833	1499.29	105.60	78.01	32.7500	1499.24	105.60	77.77
31.6000	1499.30	105.60	77.97	32.7667	1499.17	105.60	77.78
31.6167	1499.29	105.60	77.93	32.7833	1499.24	105.60	77.78
31.6333	1499.31	105.60	77.89	32.8000	1499.17	105.70	77.81
31.6500	1499.32	105.60	77.84	32.8167	1499.20	105.60	77.81
31.6667	1499.26	105.60	77.88	32.8333	1499.22	105.70	77.77
31.6833	1499.25	105.60	77.82	32.8500	1499.19	105.70	77.74
31.7000	1499.31	105.60	77.79	32.8667	1499.20	105.60	77.76
31.7167	1499.30	105.60	77.77	32.8833	1499.22	105.70	77.76
31.7333	1499.28	105.60	77.78	32.9000	1499.18	105.70	77.77
31.7500	1499.28	105.60	77.80	32.9167	1499.22	105.70	77.78
31.7667	1499.27	105.60	77.85	32.9333	1499.16	105.70	77.80
31.7833	1499.23	105.60	77.88	32.9500	1499.23	105.70	77.79
31.8000	1499.22	105.60	77.86	32.9667	1499.21	105.70	77.79
31.8167	1499.26	105.60	77.82	32.9833	1499.20	105.70	77.81
31.8333	1499.25	105.60	77.87	33.0000	1499.19	105.70	77.84
31.8667	1499.22	105.60	77.92	33.0167	1499.22	105.70	77.82
31.8833	1499.25	105.60	77.91	33.0333	1499.21	105.70	77.81
31.9000	1499.25	105.60	77.93	33.0500	1499.20	105.70	77.80
31.9167	1499.23	105.60	77.92	33.0667	1499.22	105.70	77.78
31.9333	1499.24	105.60	77.88	33.0833	1499.18	105.70	77.80
31.9500	1499.26	105.60	77.85	33.1000	1499.16	105.70	77.80
31.9667	1499.24	105.60	77.80	33.1167	1499.18	105.70	77.81
31.9833	1499.25	105.60	77.78	33.1333	1499.17	105.70	77.79
32.0000	1499.25	105.60	77.76	33.1500	1499.18	105.70	77.81
32.0167	1499.23	105.60	77.74	33.1667	1499.16	105.70	77.76
32.0333	1499.26	105.60	77.76	33.1833	1499.16	105.70	77.79
32.0500	1499.24	105.60	77.72	33.2000	1499.18	105.70	77.80
32.0667	1499.21	105.60	77.70	33.2167	1499.16	105.70	77.79
32.0833	1499.24	105.60	77.71	33.2333	1499.17	105.70	77.79
32.1000	1499.20	105.60	77.66	33.2500	1499.17	105.70	77.75
32.1167	1499.21	105.60	77.67	33.2667	1499.18	105.70	77.79
32.1333	1499.24	105.60	77.70	33.2833	1499.17	105.70	77.82
32.1500	1499.21	105.60	77.69	33.3000	1499.19	105.70	77.84
32.1667	1499.21	105.60	77.68	33.3167	1499.18	105.70	77.83
32.1833	1499.21	105.60	77.65	33.3333	1499.20	105.70	77.87
32.2000	1499.22	105.60	77.67	33.3500	1499.19	105.70	77.87
32.2167	1499.20	105.60	77.64	33.3667	1499.21	105.70	77.80
32.2333	1499.21	105.60	77.67	33.3833	1499.15	105.70	77.82
32.2500	1499.22	105.60	77.64	33.4000	1499.21	105.70	77.79
32.2667	1499.21	105.60	77.63	33.4167	1499.20	105.70	77.79
32.2833	1499.20	105.60	77.65	33.4333	1499.21	105.70	77.81
32.3000	1499.22	105.60	77.65	33.4500	1499.17	105.70	77.83
32.3167	1499.13	105.60	77.59	33.4667	1499.22	105.70	77.84
32.3333	1499.16	105.60	77.59	33.4833	1499.16	105.70	77.90
32.3500	1499.20	105.60	77.65	33.5000	1499.20	105.70	77.87
32.3667	1499.21	105.60	77.65	33.5167	1499.16	105.70	77.85
32.3833	1499.22	105.60	77.70	33.5333	1499.18	105.70	77.83

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia
33.5500	1499.21	105.70	77.79
33.5667	1499.20	105.70	77.73
33.5833	1499.22	105.70	77.70
33.6000	1499.22	105.70	77.69
33.6167	1499.21	105.70	77.69
33.6333	1499.17	105.70	77.68
33.6500	1499.18	105.70	77.67
33.6667	1499.21	105.70	77.69
33.6833	1499.19	105.70	77.71
33.7000	1499.16	105.70	77.69
33.7167	1499.19	105.70	77.67
33.7333	1499.19	105.70	77.67
33.7500	1499.20	105.70	77.64
33.7667	1499.17	105.70	77.62
33.7833	1499.20	105.70	77.61
33.8000	1499.18	105.70	77.63
33.8167	1499.20	105.70	77.64
33.8333	1499.18	105.70	77.62
33.8500	1499.19	105.70	77.62
33.8667	1499.17	105.70	77.61
33.8833	1499.16	105.70	77.60
33.9000	1499.17	105.70	77.56
33.9167	1499.18	105.70	77.57
33.9333	1499.17	105.70	77.57
33.9500	1499.19	105.70	77.57
33.9667	1499.14	105.70	77.55
33.9833	1499.16	105.70	77.54
34.0000	1499.16	105.70	77.53
34.0167	1499.21	105.70	77.52
34.0333	1499.16	105.70	77.52
34.0500	1499.14	105.70	77.49
34.0667	1499.17	105.70	77.51
34.0833	1499.15	105.70	77.52
34.1000	1499.14	105.70	77.58
34.1167	1499.15	105.70	77.61
34.1333	1499.14	105.70	77.60
34.1500	1499.16	105.70	77.59
34.1667	1499.13	105.70	77.57
34.1833	1499.16	105.70	77.56
34.2000	1499.16	105.70	77.57
34.2167	1499.08	105.70	77.56
34.2333	1499.12	105.70	77.55
34.2500	1499.15	105.70	77.57
34.2667	1499.12	105.70	77.56
34.2833	1499.11	105.70	77.56
34.3000	1499.11	105.70	77.57
34.3167	1499.14	105.70	77.59
34.3333	1499.12	105.70	77.59
34.3500	1499.14	105.70	77.58
34.3667	1499.12	105.70	77.61
34.3833	1499.13	105.70	77.62
34.4000	1499.13	105.70	77.61
34.4167	1499.11	105.70	77.62
34.4333	1499.11	105.70	77.62
34.4500	1499.12	105.70	77.61
34.4667	1499.12	105.70	77.60
34.4833	1499.11	105.70	77.60
34.5000	1499.13	105.70	77.57
34.5167	1499.15	105.70	77.58
34.5333	1499.12	105.70	77.58
34.5500	1499.14	105.70	77.57
34.5667	1499.17	105.70	77.55
34.5833	1499.13	105.70	77.51
34.6000	1499.16	105.70	77.51
34.6167	1499.11	105.70	77.51
34.6333	1499.14	105.70	77.52
34.6500	1499.18	105.70	77.52
34.6667	1499.17	105.70	77.53
34.6833	1499.15	105.70	77.56
34.7000	1499.15	105.70	77.55
34.7167	1499.10	105.70	77.55
34.7333	1499.17	105.70	77.58
34.7500	1499.12	105.70	77.57
34.7667	1499.15	105.70	77.57
34.7833	1499.15	105.70	77.55
34.8000	1499.17	105.70	77.52
34.8167	1499.15	105.70	77.50
34.8333	1499.15	105.70	77.47
34.8500	1499.16	105.70	77.50
34.8667	1499.16	105.70	77.47
34.8833	1499.15	105.70	77.49
34.9000	1499.16	105.70	77.48
34.9167	1499.14	105.70	77.46
34.9333	1499.12	105.70	77.47
34.9500	1499.13	105.70	77.47
34.9667	1499.15	105.70	77.48
34.9833	1499.15	105.70	77.47
35.0000	1499.11	105.70	77.45
35.0167	1499.13	105.70	77.46
35.0333	1499.12	105.70	77.48
35.0500	1499.14	105.70	77.45
35.0667	1499.12	105.70	77.45
35.0833	1499.12	105.70	77.43
35.1000	1499.13	105.70	77.43
35.1167	1499.12	105.70	77.43
35.1333	1499.11	105.70	77.44
35.1500	1499.12	105.70	77.41
35.1667	1499.11	105.70	77.40
35.1833	1499.12	105.70	77.41
35.2000	1499.12	105.70	77.42
35.2167	1499.07	105.70	77.43
35.2333	1499.11	105.70	77.41
35.2500	1499.11	105.70	77.38
35.2667	1499.11	105.70	77.40
35.2833	1499.13	105.70	77.45
35.3000	1499.11	105.70	77.41
35.3167	1499.11	105.70	77.40
35.3333	1499.11	105.80	77.41
35.3500	1499.12	105.80	77.44
35.3667	1499.13	105.70	77.44
35.3833	1499.10	105.80	77.46
35.4000	1499.18	105.70	77.43
35.4167	1499.08	105.80	77.43
35.4333	1499.14	105.70	77.45
35.4500	1499.11	105.80	77.46
35.4667	1499.08	105.80	77.46
35.4833	1499.09	105.80	77.46
35.5000	1499.10	105.80	77.45
35.5167	1499.09	105.80	77.45
35.5333	1499.11	105.80	77.46
35.5500	1499.09	105.80	77.46
35.5667	1499.10	105.80	77.47
35.5833	1499.08	105.80	77.50
35.6000	1499.09	105.80	77.53
35.6167	1499.10	105.80	77.50
35.6333	1499.09	105.80	77.50
35.6500	1499.08	105.80	77.52
35.6667	1499.12	105.80	77.56
35.6833	1499.13	105.80	77.58
35.7000	1499.11	105.80	77.57
35.7167	1499.07	105.80	77.60
35.7333	1499.13	105.80	77.58
35.7500	1499.13	105.80	77.59
35.7667	1499.11	105.80	77.60
35.7833	1499.15	105.80	77.64
35.8000	1499.15	105.80	77.63
35.8167	1499.11	105.80	77.64
35.8333	1499.12	105.80	77.63

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
35.8500	1499.10	105.80	77.64	37.0000	1499.06	105.80	77.50
35.8667	1499.09	105.80	77.64	37.0167	1499.12	105.80	77.51
35.8833	1499.12	105.80	77.63	37.0333	1499.14	105.80	77.51
35.9000	1499.10	105.80	77.62	37.0500	1499.11	105.80	77.54
35.9167	1499.13	105.80	77.60	37.0667	1499.08	105.80	77.53
35.9333	1499.14	105.80	77.58	37.0833	1499.12	105.80	77.50
35.9500	1499.13	105.80	77.57	37.1000	1499.08	105.80	77.48
35.9667	1499.12	105.80	77.59	37.1167	1499.06	105.80	77.48
35.9833	1499.11	105.80	77.61	37.1333	1499.05	105.80	77.46
36.0000	1499.11	105.80	77.59	37.1500	1499.08	105.80	77.46
36.0167	1499.06	105.80	77.60	37.1667	1499.07	105.80	77.48
36.0333	1499.13	105.80	77.62	37.1833	1499.10	105.80	77.50
36.0500	1499.10	105.80	77.63	37.2000	1499.07	105.80	77.52
36.0667	1499.10	105.80	77.58	37.2167	1499.09	105.80	77.53
36.0833	1499.08	105.80	77.53	37.2333	1499.05	105.80	77.50
36.1000	1499.09	105.80	77.52	37.2500	1499.08	105.80	77.52
36.1167	1499.10	105.80	77.51	37.2667	1499.10	105.80	77.51
36.1333	1499.09	105.80	77.52	37.2833	1499.05	105.80	77.48
36.1500	1499.10	105.80	77.53	37.3000	1499.12	105.80	77.46
36.1667	1499.09	105.80	77.54	37.3167	1499.08	105.80	77.46
36.1833	1499.13	105.80	77.51	37.3333	1499.10	105.80	77.42
36.2000	1499.12	105.80	77.48	37.3500	1499.11	105.80	77.43
36.2167	1499.10	105.80	77.47	37.3667	1499.11	105.80	77.43
36.2333	1499.09	105.80	77.47	37.3833	1499.06	105.80	77.41
36.2500	1499.09	105.80	77.49	37.4000	1499.09	105.80	77.43
36.2667	1499.10	105.80	77.50	37.4167	1499.05	105.80	77.41
36.2833	1499.15	105.80	77.49	37.4333	1499.12	105.80	77.41
36.3000	1499.12	105.80	77.45	37.4500	1499.12	105.80	77.45
36.3167	1499.11	105.80	77.42	37.4667	1499.04	105.80	77.48
36.3333	1499.11	105.80	77.42	37.4833	1499.08	105.80	77.48
36.3500	1499.11	105.80	77.42	37.5000	1499.05	105.80	77.46
36.3667	1499.15	105.80	77.46	37.5167	1499.04	105.80	77.41
36.3833	1499.11	105.80	77.49	37.5333	1499.05	105.80	77.45
36.4000	1499.09	105.80	77.50	37.5500	1499.03	105.80	77.43
36.4167	1499.09	105.80	77.51	37.5667	1499.04	105.80	77.46
36.4333	1499.12	105.80	77.52	37.5833	1499.04	105.80	77.50
36.4500	1499.13	105.80	77.50	37.6000	1499.10	105.80	77.52
36.4667	1499.11	105.80	77.52	37.6167	1499.03	105.80	77.52
36.4833	1499.11	105.80	77.49	37.6333	1499.11	105.80	77.51
36.5000	1499.11	105.80	77.47	37.6500	1499.05	105.80	77.52
36.5167	1499.12	105.80	77.45	37.6667	1499.08	105.80	77.49
36.5333	1499.08	105.80	77.42	37.6833	1499.09	105.80	77.47
36.5500	1499.05	105.80	77.43	37.7000	1499.05	105.80	77.45
36.5667	1499.12	105.80	77.44	37.7167	1499.04	105.80	77.42
36.5833	1499.14	105.80	77.44	37.7333	1499.10	105.80	77.37
36.6000	1499.06	105.80	77.42	37.7500	1499.07	105.80	77.37
36.6167	1499.12	105.80	77.41	37.7667	1499.04	105.80	77.38
36.6333	1499.11	105.80	77.42	37.7833	1499.08	105.80	77.38
36.6500	1499.11	105.80	77.42	37.8000	1499.06	105.80	77.37
36.6667	1499.04	105.80	77.44	37.8167	1499.06	105.80	77.37
36.6833	1499.09	105.80	77.42	37.8333	1499.06	105.80	77.41
36.7000	1499.11	105.80	77.45	37.8500	1499.06	105.80	77.41
36.7167	1499.10	105.80	77.44	37.8667	1499.03	105.80	77.38
36.7333	1499.09	105.80	77.45	37.8833	1499.06	105.80	77.41
36.7500	1499.11	105.80	77.41	37.9000	1499.06	105.80	77.41
36.7667	1499.07	105.80	77.44	37.9167	1499.06	105.80	77.42
36.7833	1499.10	105.80	77.42	37.9333	1499.07	105.80	77.45
36.8000	1499.10	105.80	77.42	37.9500	1499.07	105.80	77.41
36.8167	1499.13	105.80	77.40	37.9667	1499.08	105.80	77.39
36.8333	1499.09	105.80	77.38	37.9833	1499.07	105.80	77.37
36.8500	1499.12	105.80	77.38	38.0000	1499.06	105.80	77.36
36.8667	1499.12	105.80	77.37	38.0167	1499.03	105.80	77.32
36.8833	1499.12	105.80	77.38	38.0333	1499.07	105.80	77.31
36.9000	1499.10	105.80	77.39	38.0500	1499.07	105.90	77.34
36.9167	1499.08	105.80	77.41	38.0667	1499.06	105.80	77.35
36.9333	1499.10	105.80	77.44	38.0833	1499.02	105.90	77.36
36.9500	1499.09	105.80	77.46	38.1000	1499.05	105.90	77.32
36.9667	1499.08	105.80	77.46	38.1167	1499.02	105.90	77.32
36.9833	1499.10	105.80	77.47	38.1333	1499.02	105.90	77.30

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
38.1500	1499.04	105.90	77.30	39.3000	1498.97	105.90	77.10
38.1667	1499.01	105.90	77.31	39.3167	1498.96	105.90	77.09
38.1833	1499.07	105.90	77.34	39.3333	1498.97	105.90	77.08
38.2000	1499.04	105.90	77.34	39.3500	1498.96	105.90	77.10
38.2167	1499.02	105.90	77.34	39.3667	1498.95	105.90	77.08
38.2333	1499.03	105.90	77.34	39.3833	1498.95	105.90	77.10
38.2500	1499.03	105.90	77.32	39.4000	1498.96	105.90	77.12
38.2667	1499.02	105.90	77.35	39.4167	1498.97	105.90	77.14
38.2833	1499.03	105.90	77.33	39.4333	1498.97	105.90	77.14
38.3000	1499.03	105.90	77.37	39.4500	1498.97	105.90	77.15
38.3167	1499.03	105.90	77.34	39.4667	1498.93	105.90	77.16
38.3333	1499.04	105.90	77.32	39.4833	1498.92	105.90	77.15
38.3500	1499.04	105.90	77.29	39.5000	1498.96	105.90	77.17
38.3667	1499.06	105.90	77.30	39.5167	1498.98	105.90	77.16
38.3833	1499.04	105.90	77.30	39.5333	1498.95	105.90	77.18
38.4000	1499.03	105.90	77.30	39.5500	1498.96	105.90	77.18
38.4167	1499.04	105.90	77.33	39.5667	1498.95	105.90	77.19
38.4333	1499.04	105.90	77.35	39.5833	1498.95	105.90	77.17
38.4500	1499.02	105.90	77.37	39.6000	1498.95	105.90	77.19
38.4667	1499.06	105.90	77.36	39.6167	1498.97	105.90	77.21
38.4833	1499.04	105.90	77.39	39.6333	1498.95	105.90	77.22
38.5000	1498.99	105.90	77.36	39.6500	1498.97	105.90	77.23
38.5167	1499.03	105.90	77.32	39.6667	1498.95	105.90	77.21
38.5333	1499.03	105.90	77.31	39.6833	1498.95	105.90	77.21
38.5500	1499.06	105.90	77.29	39.7000	1498.97	105.90	77.17
38.5667	1499.01	105.90	77.28	39.7167	1498.98	105.90	77.14
38.5833	1498.99	105.90	77.29	39.7333	1498.93	105.90	77.15
38.6000	1498.99	105.90	77.22	39.7500	1498.96	105.90	77.12
38.6167	1499.00	105.90	77.24	39.7667	1498.97	105.90	77.08
38.6333	1499.00	105.90	77.21	39.7833	1498.96	105.90	77.08
38.6500	1498.97	105.90	77.20	39.8000	1498.95	105.90	77.07
38.6667	1499.01	105.90	77.21	39.8167	1498.97	105.90	77.04
38.6833	1499.02	105.90	77.21	39.8333	1498.95	105.90	77.03
38.7000	1499.02	105.90	77.21	39.8500	1498.99	105.90	77.05
38.7167	1498.99	105.90	77.23	39.8667	1498.91	105.90	77.07
38.7333	1498.98	105.90	77.24	39.8833	1498.97	105.90	77.06
38.7500	1499.01	105.90	77.24	39.9000	1499.00	105.90	77.07
38.7667	1498.99	105.90	77.22	39.9167	1498.89	105.90	77.06
38.7833	1498.99	105.90	77.20	39.9333	1498.93	105.90	77.05
38.8000	1499.02	105.90	77.17	39.9500	1498.99	105.90	77.01
38.8167	1499.02	105.90	77.14	39.9667	1498.97	105.90	77.02
38.8333	1499.07	105.90	77.16	39.9833	1498.97	105.90	77.03
38.8500	1499.01	105.90	77.17	40.0000	1498.99	105.90	77.07
38.8667	1499.04	105.90	77.18	40.0167	1498.97	105.90	77.06
38.8833	1499.03	105.90	77.22	40.0333	1498.96	105.90	77.09
38.9000	1499.00	105.90	77.23	40.0500	1498.95	105.90	77.10
38.9167	1499.00	105.90	77.23	40.0667	1498.97	105.90	77.10
38.9333	1499.04	105.90	77.22	40.0833	1498.94	105.90	77.10
38.9500	1499.00	105.90	77.21	40.1000	1500.38	105.90	77.13
38.9667	1499.01	105.90	77.14	40.1500	1485.77	105.90	76.89
38.9833	1499.02	105.90	77.14	40.1667	1414.98	105.90	76.20
39.0000	1499.02	105.90	77.13	40.1833	1370.03	105.80	76.29
39.0167	1499.02	105.90	77.13	40.2000	1370.46	105.60	76.60
39.0333	1499.06	105.90	77.10	40.2167	1370.52	105.40	76.81
39.0500	1498.98	105.90	77.12	40.2333	1370.59	105.20	76.88
39.0667	1498.98	105.90	77.11	40.2500	1370.59	105.00	76.93
39.0833	1499.00	105.90	77.13	40.2667	1370.57	104.90	76.96
39.1000	1498.98	105.90	77.11	40.2833	1319.82	104.70	76.39
39.1167	1498.99	105.90	77.14	40.3000	1246.05	104.50	75.87
39.1333	1498.96	105.90	77.12	40.3167	1170.66	104.20	75.60
39.1500	1498.97	105.90	77.09	40.3333	1095.43	103.90	75.53
39.1667	1498.98	105.90	77.09	40.3500	1017.31	103.40	75.49
39.1833	1498.99	105.90	77.09	40.3667	944.68	102.90	75.40
39.2000	1498.98	105.90	77.07	40.3833	942.93	102.30	76.27
39.2167	1498.96	105.90	77.10	40.4000	943.13	101.80	76.68
39.2333	1498.94	105.90	77.08	40.4167	943.12	101.30	76.77
39.2500	1498.98	105.90	77.08	40.4333	943.14	100.80	76.82
39.2667	1498.98	105.90	77.09	40.4500	943.08	100.40	76.85
39.2833	1498.97	105.90	77.09	40.4667	943.07	100.00	76.88

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia	Time,hra	BHP, psia	Temp, °F	Tbg, psia
40.4833	942.98	99.70	76.86	45.1083	648.31	69.00	12.80
40.5000	896.62	99.40	76.17	45.1167	688.22	69.00	12.80
40.5167	795.71	99.00	75.52	45.1250	712.68	69.00	12.80
40.5333	690.68	98.60	75.26	45.1333	747.66	69.00	12.80
40.5500	594.87	98.20	75.11	45.1417	935.36	69.00	12.80
40.5833	515.27	97.00	76.18	45.1500	924.78	69.00	12.80
40.6000	515.47	96.40	76.56	45.1583	1012.27	69.00	12.80
40.6167	515.54	96.00	76.72	45.1667	1120.55	69.00	12.80
40.6333	515.54	95.50	76.85	45.1750	1064.80	69.00	12.80
40.6500	515.47	95.00	76.90	45.1833	1139.15	69.00	12.80
40.6667	515.41	94.60	76.94	45.1917	1113.50	69.00	12.80
40.6833	470.27	94.30	76.36	45.2000	1110.92	69.00	12.80
40.7000	384.26	93.90	75.71	45.2083	1110.77	69.00	12.80
40.7167	306.22	93.50	75.43	45.2167	1111.62	69.00	12.80
40.7333	300.93	93.10	76.31	45.2250	1111.97	69.00	12.80
40.7500	301.20	92.70	76.70	45.2333	1112.19	69.00	12.80
40.7667	301.23	92.40	76.84	45.2417	1112.26	69.00	12.80
40.7833	301.26	92.10	76.94	45.2500	1112.22	69.00	12.80
40.8000	301.27	91.80	76.96	45.2583	1112.03	69.00	12.80
40.8167	301.23	91.50	76.95	45.2667	1111.93	69.00	12.80
40.8333	301.18	91.30	76.97	45.2750	1111.77	69.00	12.80
40.8500	267.16	91.10	76.44	45.2833	1111.71	69.00	12.80
40.8667	204.80	90.90	75.99	45.2917	1111.75	69.00	12.80
40.8833	138.19	90.60	75.71	45.3000	1111.77	69.00	12.80
40.9000	100.78	90.30	76.01	45.3083	1111.75	69.00	12.80
40.9167	86.03	89.90	76.31	45.3167	1111.73	69.00	12.80
40.9333	77.95	88.60	76.54	45.3250	1111.69	69.00	12.80
40.9500	76.85	86.90	76.77	45.3333	1111.62	69.00	12.80
40.9667	76.99	85.20	76.84	45.3417	1111.47	69.00	12.80
40.9750	76.69	84.30	76.88	45.3500	1111.27	69.00	12.80
40.9778	76.66	83.90	76.89	45.3583	1111.06	69.00	12.80
40.9806	76.63	83.50	76.88	45.3667	1111.05	69.00	12.80
40.9833	76.60	83.30	76.88	45.3750	1111.06	69.00	12.80
40.9861	76.50	83.00	76.89	45.3833	1110.95	69.00	12.80
40.9889	76.53	82.60	76.89	45.3917	1110.79	69.00	12.80
40.9917	76.50	82.50	76.90	45.4000	1110.59	69.00	12.80
40.9944	76.61	82.10	76.90	45.4083	1110.42	69.00	12.80
40.9972	76.58	81.90	76.90	45.4167	1110.38	69.00	12.80
41.0000	76.50	81.60	76.90	45.4250	1110.35	69.00	12.80
41.2444	14.79	69.10	0.78	45.4333	1110.30	69.00	12.80
41.2500	14.75	69.00	0.78	45.4417	1110.25	69.00	12.80
44.9944	0.14	69.00	12.80	45.4500	1110.20	69.00	12.80
45.0056	11.61	69.00	12.80	45.4583	1110.17	69.00	12.80
45.0083	11.66	69.00	12.80	45.4667	1110.14	69.00	12.80
45.0111	11.65	69.00	12.80	45.4750	1110.14	69.00	12.80
45.0139	11.65	69.00	12.80	45.4833	1110.17	69.00	12.80
45.0167	11.65	69.00	12.80	45.4917	1110.14	69.00	12.80
45.0194	222.28	69.00	12.80	45.5000	1110.08	69.00	12.80
45.0222	239.11	69.00	12.80	45.5083	1110.04	69.00	12.80
45.0250	275.47	69.00	12.80	45.5167	1110.04	69.00	12.80
45.0278	284.72	69.00	12.80	45.5250	1110.05	69.00	12.80
45.0306	292.47	69.00	12.80	45.5333	1110.06	69.00	12.80
45.0333	313.52	69.00	12.80	45.5417	1110.06	69.00	12.80
45.0361	341.47	69.00	12.80	45.5500	1110.03	69.00	12.80
45.0389	351.11	69.00	12.80	45.5583	1109.96	69.00	12.80
45.0417	360.27	69.00	12.80	45.5667	1109.89	69.00	12.80
45.0444	402.61	69.00	12.80	45.5750	1109.91	69.00	12.80
45.0472	429.56	69.00	12.80	45.5833	1109.89	69.00	12.80
45.0500	448.88	69.00	12.80	45.5917	1109.86	69.00	12.80
45.0528	466.97	69.00	12.80	45.6000	1109.78	69.00	12.80
45.0556	479.30	69.00	12.80	45.6083	1109.72	69.00	12.80
45.0583	501.94	69.00	12.80	45.6167	1109.68	69.00	12.80
45.0611	516.53	69.00	12.80	45.6250	1109.57	69.00	12.80
45.0639	560.58	69.00	12.80	45.6333	1109.61	69.00	12.80
45.0667	575.06	69.00	12.80	45.6417	1109.64	69.00	12.80
45.0694	587.89	69.00	12.80	45.6500	1109.59	69.00	12.80
45.0833	551.06	69.00	12.80	45.6583	1109.45	69.00	12.80
45.0917	550.75	69.00	12.80	45.6667	1109.28	69.00	12.80
45.1000	594.91	69.00	12.80	45.6750	1109.19	69.00	12.80

Reference Depth: 3300'

Time,hra	BHP, psia	Temp, °F	Tbg, psia
45.6833	1108.84	69.00	12.80
45.6917	1108.71	69.00	12.80
45.7000	1108.69	69.00	12.80
45.7083	1108.69	69.00	12.80
45.7167	1108.71	69.00	12.80
45.7250	1108.71	69.00	12.80
45.7333	1108.72	69.00	12.80
45.7417	1108.64	69.00	12.80
45.7500	1108.61	69.00	12.80
45.7583	1108.57	69.00	12.80
45.7667	1108.58	69.00	12.80
45.7750	1108.55	69.00	12.80
45.7833	1108.47	69.00	12.80
45.7917	1108.45	69.00	12.80
45.8000	1108.43	69.00	12.80
45.8083	1108.40	69.00	12.80
45.8167	1108.36	69.00	12.80
45.8250	1108.27	69.00	12.80
45.8333	1108.19	69.00	12.80
45.8417	1108.16	69.00	12.80
45.8500	1108.15	69.00	12.80
45.8583	1108.14	69.00	12.80
45.8667	1108.19	69.00	12.80
45.8750	1108.23	69.00	12.80
45.8833	1108.21	69.00	12.80
45.8917	1108.16	69.00	12.80
45.9000	1108.15	69.00	12.80
45.9083	1108.17	69.00	12.80
45.9167	1108.14	69.00	12.80
45.9250	1108.09	69.00	12.80
45.9333	1108.06	69.00	12.80
45.9417	1108.02	69.00	12.80
45.9500	1108.02	69.00	12.80
45.9583	1107.99	69.00	12.80
45.9667	1107.98	69.00	12.80
45.9750	1108.00	69.00	12.80
45.9833	1107.99	69.00	12.80
45.9917	1107.93	69.00	12.80
46.0000	1107.89	69.00	12.80
46.0083	1107.84	69.00	12.80
46.0167	1107.81	69.00	12.80
46.0250	1107.80	69.00	12.80
46.0333	1107.76	69.00	12.80
46.0417	1107.67	69.00	12.80
46.0500	1107.61	69.00	12.80
46.0583	1107.61	69.00	12.80
46.0667	1107.60	69.00	12.80
46.0750	1107.53	69.00	12.80
46.0833	1107.50	69.00	12.80
46.0917	1107.45	69.00	12.80
46.1000	1107.43	69.00	12.80
46.1083	1107.39	69.00	12.80
46.1167	1107.31	69.00	12.80
46.1250	1107.16	69.00	12.80
46.1333	1107.03	69.00	12.80
46.1417	1106.95	69.00	12.80
46.1500	1106.85	69.00	12.80
46.1583	1106.82	69.00	12.80
46.1667	1106.81	69.00	12.80
46.1750	1106.84	69.00	12.80
46.1833	1106.88	69.00	12.80
46.1917	1106.89	69.00	12.80
46.2000	1106.91	69.00	12.80
46.2083	1106.89	69.00	12.80
46.2167	1106.89	69.00	12.80
46.2250	1106.88	69.00	12.80
46.2333	1105.97	69.00	12.80
46.2417	1091.33	69.00	12.80
46.2500	1028.47	69.00	12.80
46.2583	934.19	69.00	12.80

SAMPLE RESULTS FOR #1A WELL FEED FOR MIT

DATE	TIME	VISCOSITY	SPECIFIC GRAVITY
1-17-97	6pm	.574 cps	1.0007
1-18-97	2am	.565 cps	1.0007
1-18-97	10am	.555 cps	1.0008
1-18-97	6pm	.566 cps	1.0007
1-19-97	2am	.545 cps	1.0007
1-19-97	10am	.573 cps	1.0007
1-19-97	6pm	.564 cps	1.0007
1-19-97	10pm	.570 cps	1.0008
1-20-97	2am	.565 cps	1.0008
1-20-97	10pm	.560 cps	1.0008
1-20-97	6am	.555 cps	1.0008
1-20-97	2pm	.587 cps	1.0008
1-21-97	6am	.555 cps	1.0008

1-25-97

L.P. Molina

Attn: Wes Smith

From: Bryan Barrington

Wes,

Let me know if you need anything else.

Bryan

409-241-4413

Mechanical Integrity Test Log Sheet for 1A well

Date	Time ##	OPER INIT.	Well Flow (GPM)	Well HD. INJ. PRESS. PSIG CR2/FIELD		ANN. PRESS. CR2/FIELD		DIFF. PRESS.	BOILER F.W. FLOW	WELL SAMPLE ++	V-509 INLET TEMP
1-17	6P	SG	207	600	565	580	450	114	2.08	✓	90
1-17	10P	MAS	210	472.5	460	580	570	111	2.08	—	90
1-18	2A	MAS	210	480	460	580	570	105	1.92	✓	92
1-18	6A	MAS	210	480	460	560	570	103.5	2.08	—	88
1-18	10A	EO	210	480	460	560	570	103.3	2.08	✓	88
1-18	2P	EO	198	480	462	570	574	112.5	2.08	—	84
1-18	6P	EO	204	480	462	580	570	111	2.08	✓	86
1-18	10P	RL	204	480	462	580	570	105	2.16	—	84
1-19	2A	RL	204	480	462	580	575	105	2.16	✓	88
1-19	6A	RL	204	480	462	580	570	105	2.16	—	88
1-19	10A	GVW	204	480	468	585	588	105	2.08	✓	92
1-19	2P	GVW	201	480	475	580	590	105	2.08	—	96
1-19	6P	GVW	207	488	480	600	590	114	2.16	✓	96
1-19	10P	TQ	210	488	480	590	580	105	2.16	✓	96
1-20	2A	TQ	207	488	480	590	585	108	2.08	✓	94
1-20	6A	TQ	210	495	480	590	585	104	2.08	✓	96
1-20	10A	TH	204	495	495	580	590	102	2.08	—	96
1-20	2P	EO	207	495	482	590	590	108	2.08	✓	96
1-20	6P	TH	204	495	490	590	596	105	2.24	—	96
1-20	10P	TQ	207	495	485	600	595	105	2.16	✓	96
1-21	2A	TQ	207	503	485	600	595	108	2.24	—	96
1-21	6A	TQ	207	503	485	600	595	108	2.24	✓	98
1-21	10A	TH	204	502	485	600	595	105	2.24	—	98
1-21	2P	TH	204	503	485	600	595	105	2.24	—	98

Record reading every 4 hours

++ Take 1 pint sample off injection pump every 8 hours, catch 1st sample at start

2:00 pm 1-21-97 - Shut-in well flow, Took BFW off annulus and lined up N_2

APPENDIX F

CALCULATION FLOW CHART

SOLUTIONS, INC.

CALCULATION FLOW CHART

1. Calculate slope value from Semi-Log Plot.

2 a. Utilize reservoir viscosity for *Initial Calculations*.

b. If required, redo calculations with waste viscosity.

3. Calculate Permeability.

4. Calculate Time to exit waste front.

5. Conditional statements.

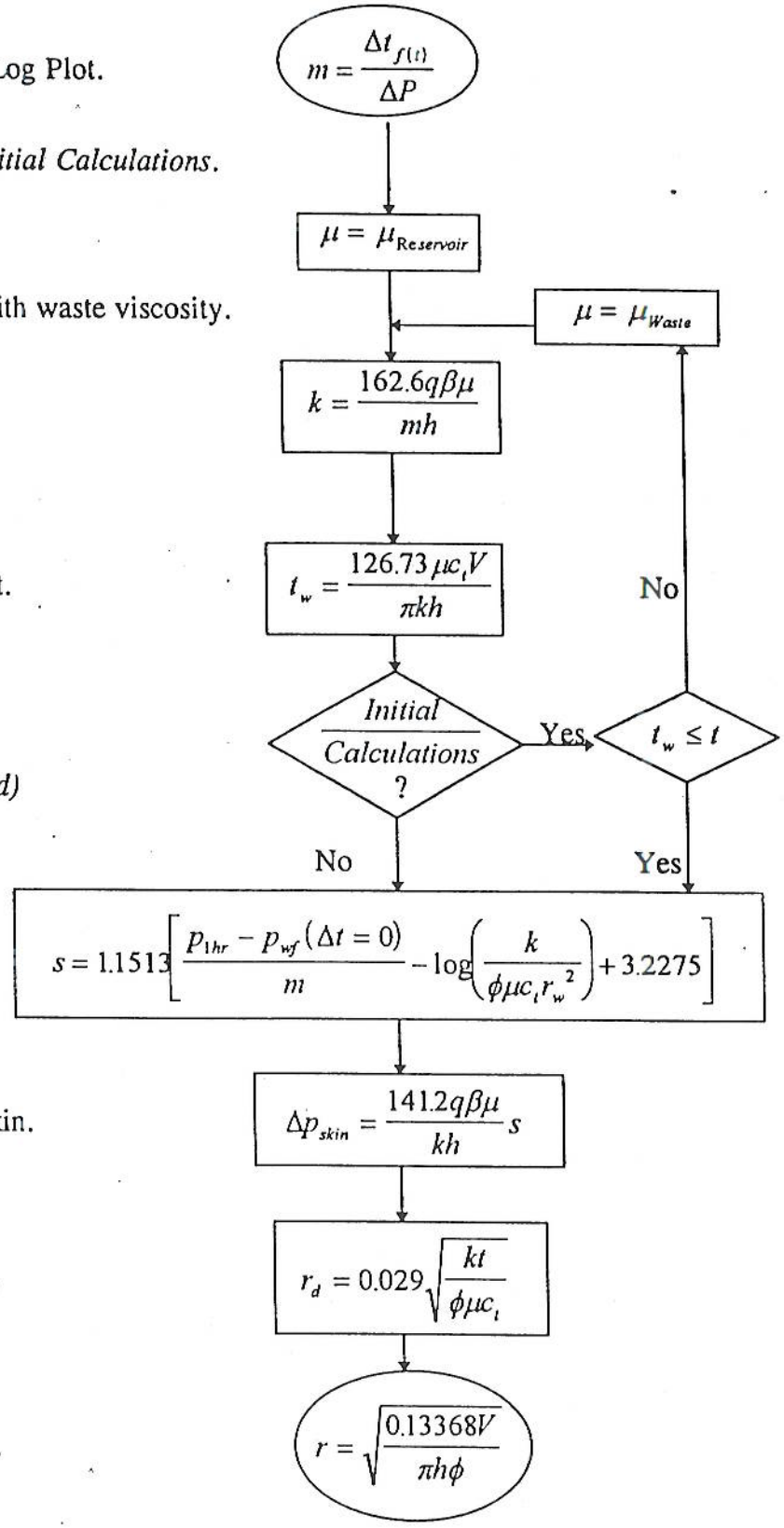
(t, beginning of radial flow period)

6. Calculate skin factor.

7. Calculate Pressure drop due to skin.

8. Calculate radius of investigation.

9. Calculate distance to waste front.



APPENDIX G

STATIC GRADIENT SURVEY DATA

SOLUTIONS, INC.

GULF COAST WELL ANALYSIS

COASTAL WIRELINE SERVICES, INC.

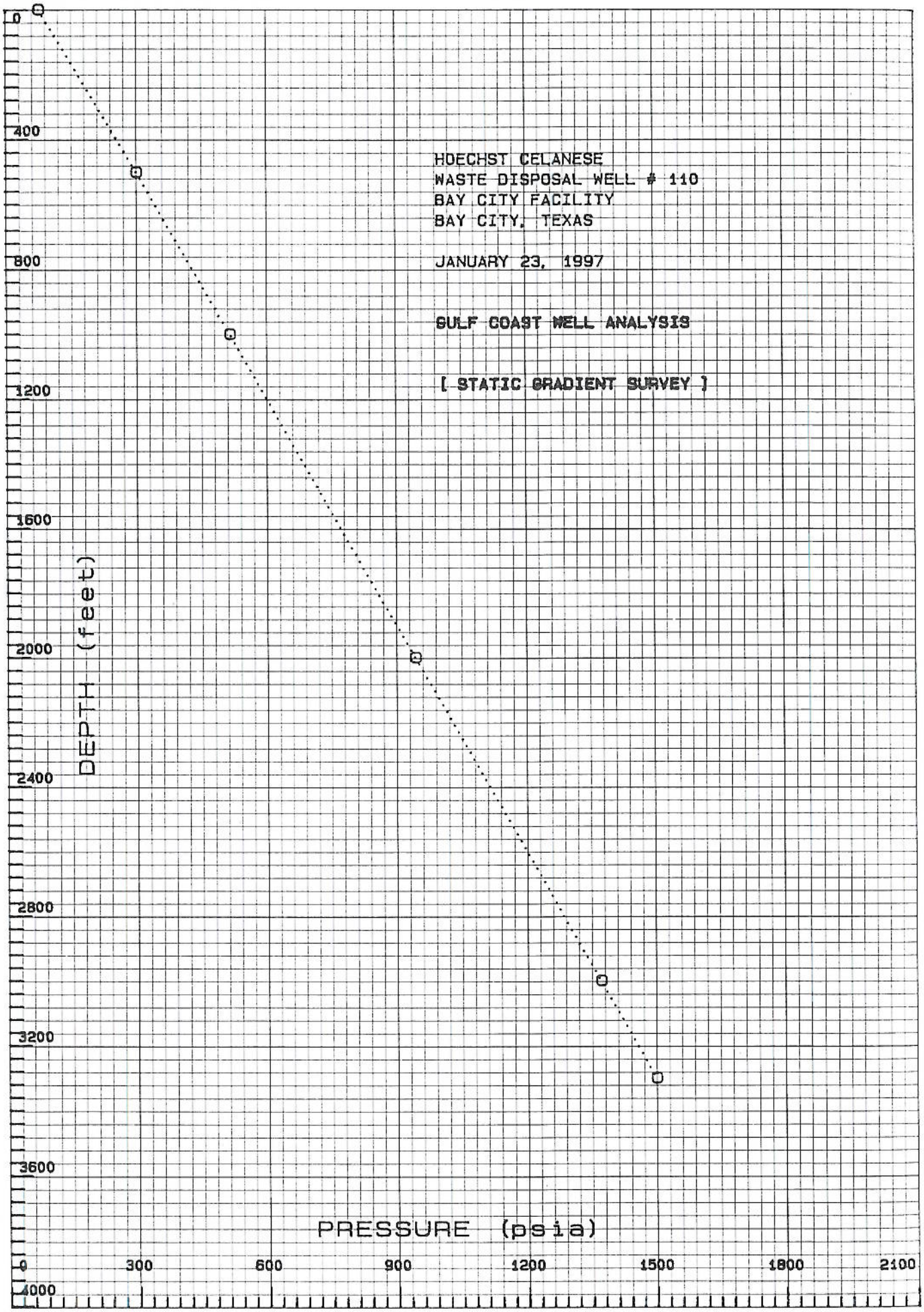
Company: Hoechst Celanese
Well No.: Waste Disposal Well # 110
Field: Bay City Facility
State: Texas
Date: January 23, 1997

STATIC GRADIENT SURVEY

STOP #	M.D. FEET	T.V.D. FEET	PRESSURE PSIA	PSI/FT	MIN. STOP
1	0	0	76.50	0.000	5 Min.
2	500	500	301.18	0.449	5 Min.
3	1000	1000	515.41	0.428	5 Min.
4	2000	2000	942.98	0.428	5 Min.
5	3000	3000	1370.57	0.428	5 Min.
6	3300	3300	1498.94	0.428	38 Hrs.

Fluid Level:	0	Well Type:	Injection
Gauge Type:	Panex	Test Type:	Gradient
Gauge No.	31S-1140A	Well Status;	Static
Range:	0-5000	Engineer:	K. Rood

3909 Halik Road - Pearland, Texas 77581 - Office 281-485-6548 Telecopier 281-485-1954



46 0700

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KEUFFEL & ESSER CO. MADE IN U.S.A.

APPENDIX H

CORRESPONDENCE

SOLUTIONS, INC.

Hoechst Celanese

Chemical Group
Hoechst Celanese Corporation
Bay City Plant
PO Box 509
Highway 3057
Bay City, TX 77404-0509

December 12, 1996
IOC-058-96

FEDERAL EXPRESS MAIL

Ms. Alice Hamilton Rogers, P.E., Manager
UIC, Uranium and Radioactive Waste Section
Industrial and Hazardous Waste Division (MC-131)
Texas Natural Resource Conservation Commission
12100 Park 35 Circle
Austin, TX 78753

Subject: WDW-110 (PLANT WELL NUMBER 1A)
PROPOSED MECHANICAL INTEGRITY TEST PROCEDURES
HOECHST CELANESE CHEMICAL GROUP, LTD.
BAY CITY PLANT, BAY CITY, TX

Dear Ms. Hamilton:

Enclosed herewith as Addendum I are the proposed Mechanical Integrity Test (MIT) Procedures to demonstrate mechanical integrity of WDW-110 (Plant Well No. 1A) which are provided for your review and approval. Our plan is to conduct the testing during the week of January 20, 1997.

We appreciate in advance your consideration, review and approval of the above request.

Please don't hesitate to contact me at 409-241-4197 or Mr. B.S. Barrington at 409-241-4413 if you have any questions concerning this matter.

Very truly yours,

I. O. Coleman, Jr./cjs

I. O. Coleman, Jr.
Staff Environmental Chemist

IOC/cjs
attachment

Hoechst

cc:

Mr. Jim L. Boswell, Permit Coordinator
Underground Injection Control Team (MC-131
UIC, Uranium & Radioactive Waste Section
TX Natl Resource Conservation Commission
P.O. Box 13087
Austin, TX 78711-3087

Mr. Phil Dellinger
UIC State Programs Section (6W-SU)
Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202-2733

bcc: Via e-mail (w/o attachment)

C. J. Griffith
B. R. Hightower
R. S. O'Neal
M. L. Wyatt

w/attachment

A. Conley-Pitchell - Bridgewater
G. J. McCarthy
P. H. Richardson
R. J. Johnston
B. S. Barrington
Environmental File Nos.: 202.5 and 203.13

Mr. Tom Jones
ECO Solutions, Inc.
9800 Richmond Ave. , Ste 320
Houston, TX 77042-4519

Mr. Wesley Smith
ECO Solutions, Inc.
9800 Richmond Ave. , Ste 320
Houston, TX 77042-4519

ADDENDUM I

PROPOSED PROCEDURE TO DEMONSTRATE MECHANICAL INTEGRITY FOR WDW-110 (WELL 1A)

HOECHST CELANESE CHEMICAL GROUP, LTD.
BAY CITY FACILITY

PROPOSED PROCEDURE TO DEMONSTRATE MECHANICAL INTEGRITY TESTING FOR WDW-110 (WELL #1-A)

The following step-by-step proposed procedures were developed in accordance with the Underground Injection Control (UIC) and the Hazardous Waste Disposal Injection Restrictions (HWDIR) Programs as issued by the United States Environmental Protection Agency (US EPA) and promulgated by the Texas Natural Resource Conservation Commission (TNRCC).

Except where noted, all steps of this procedure will be performed by ECO's personnel.

1) Request and secure approval from the TNRCC to demonstrate mechanical integrity testing (MIT). (ECO/HCCG)

* Define annulus pressure test and downhole logging procedures.

* Draft a letter including MIT procedures for review and approval by HCCG's personnel which will provide formal notification to the TNRCC of the intent and scope to demonstrate MIT.

* Modify these procedures as per HCCG's comments and submit to the TNRCC for review and approval.

2) Prepare well for MIT. (HCCG)

* Check wellhead valves to insure that special fittings can be easily installed during the MIT. ECO requests that 2" NPT connections be available on the tubing outlets.

* Since wireline services will be run while injecting into the well, a full opening valve (minimum 2" inside diameter) will be required on top the wellhead above the inlet effluent flowline.

* HCCG's personnel will maintain proper annulus pressure while conducting the RAT survey. HCCG will provide historical petition data on Well #1-A for ECO's personnel for use in the report preparation.

3) Perform bottom hole pressure fall-off and static bottom hole pressure (BHP) survey. (ECO/HCCG)

* HCCG is to inject 200 non-hazardous effluent into Well #1-A at a constant and stable high rate (+/-~~225~~ gpm) for a minimum of four days prior to performing the falloff test. HCCG will furnish non-hazardous fluid.

* Move in and rig up wireline unit to run bottom hole pressure (BHP) falloff test with surface readout Panex BHP gauges.

* Go in the hole with BHP gauges and correlate depth measurement to packer depth, and pull BHP tool up to +/-3300', or to the depth previously performed BHP surveys have been conducted.

* Secure a representative sample of the effluent pumped into Well #1-A. Transmit fluid sample to the HCCG laboratory for analysis.

* Shut-in well. Leave well shut-in for ±48 hours, or until tubing pressure stabilizes, to obtain pressure decay data. Data obtained at the end of this test will provide static BHP.

4) Perform annulus/tubing differential pressure test (APT). (HCCG/ECO)

* Rig up digital pressure transducer units and install onto the annulus and tubing outlet.

* HCCG's personnel will adjust annulus pressure to 1000 psi higher pressure above the tubing pressure.

* Monitor annulus/tubing pressures for a minimum period of 30 minutes. Maximum allowable differential pressure change during the APT is 5% of the maximum differential test pressures.

* Rig down transducer pressure units.

5) Run radioactive tracer survey. (ECO)

* Establish ±50 gpm injection rates utilizing HCCG's injection pump and non-hazardous effluent.

* Rig up gamma ray (G/R) detector, casing collar locator (CCL) and radioactive tracer (R/A) ejector tool. Ejector contains ±10 millicuries of Iodine "131" radioactive solution.

* Continue pumping effluent into the well at a rate of ±50 gpm.

* Run G/R base log from PBTD (tag bottom) to ±300' above the packer (@ 3,330'), or up to ±3,000'. Make short repeat G/R run to prove tool repeatability.

* Run one (1) five-minute statistical log at a depth of 3,310'.

* Release first R/A slug inside tubing ±300' above the packer while pumping effluent down the tubing at an injection rate of ±50 gpm. Make multiple recorded passes following the R/A slug (1) down the tubing, (2) into the borehole and (3) into the disposal zone until the R/A slug virtually disappears and cannot be distinguished from the normal background G/R radioactivity. Repeat the multiple pass survey.

* Release second R/A slug from tool at ±20' above top perforation, or at ±3,310' and hold stationary. Place recorder on time-drive sequence. Logging time will be predetermined based on actual injection rate as agreed upon by the TNRCC inspector.

* Repeat stationary sequence test above.

* Run final base G/R from PBTD to +/-300' above the packer (same interval as original base G/R log) to verify that all R/A materials have been flushed into the disposal zone and that no fluid is migrating up behind the casing string.

* Pull out of the hole and rig down wireline..

6) MIT field work is completed on Well #1-A. (ECO)

* Rig down all rental equipment and move off the location.

* Advise TNRCC of test results and that well is, or is not, acceptable for injection service.. If the MIT fails, submit a workover procedure to the TNRCC. Note: This latter work is not included in the scope of this project.

* If Well #1-A has successfully passed all MIT tests, then return the well to shut-in (standby) status.

7) Submit MIT report. (ECO/HCCG)

* Prepare a draft copy of the MIT report detailing the demonstration of MIT on WDW-110 (Well #1-A).

* Submit draft report to HCCG for comments and approval.

* Modify the MIT report as per HCCG's comments and submit copies of final MIT report to HCCG. HCCG personnel will transmit final MIT report to the TNRCC.

* Receive TNRCC's acceptance letter pertaining to the MIT report.

8) Mechanical Integrity Testing Complete.