June 6, 2016

Mr. George Bower
Oil Conservation Division - District 1
1625 N. French Drive
Hobbs, New Mexico 88240

Subject: Western Refining Company, LP – State LPG Storage No. 2 MIT

Dear Mr. Bower,

Western Refining Company, LP has performed a nitrogen-brine MIT on one of their storage cavern wells, State LPG Storage No. 2 (API No. 30-025-35955), located in the Jal Station Field in Lea County, New Mexico.

Nitrogen was injected on April 27th, 2016. An hour casing test was performed successfully with the following parameters:

- Nitrogen-brine interface start depth: 1,664'
- Start Annulus Pressure: 943.87 psig
- Nitrogen-brine interface end depth: 1,664'
- End Annulus Pressure: 943.10 psig

The 60-minute casing test passed with the pressures following a stabilization trend throughout the casing test period. Nitrogen injection continued into the borehole and ceased with the nitrogen-brine interface at 1,678.5'. The well was shut in and allowed to stabilize overnight. The MIT was initialized on April 29th, 2016 at 09:00 with the following parameters:

- Annular pressure: 1,254.25 psig
- Tubing pressure: 457.29 psig
- Nitrogen-brine interface: 1,678.5'

The pressure was monitored throughout a 72 hour period and finalized on May 2nd, 2016 at 09:00 with the following parameters:

- Annular pressure: 1,245.55 psig
- Tubing pressure: 447.85 psig
- Nitrogen-brine interface: 1,678.5'
- Test Gradient at Casing Shoe: 0.80 psi/ft
- Calculated Leak Rate: 395.09 bbls/yr
- Minimum Detectable Leak Rate: 843.25 bbls/year

It was determined that State LPG Storage No. 2, at the time of this test, demonstrated the mechanical integrity required for the storage of hydrocarbons.

Included in this package are:

- MIT Report for State LPG Storage No. 2
- Test Density Log
- Test Temperature Log

Please contact me by phone (832-216-0785) or via email (eric@lonquist.com) if you have any questions.

Sincerely,

Eric Busch
Senior Vice President

CC: Richard Lonquist – Lonquist Field Service, LLC

LONQUIST FIELD SERVICE

Mechanical Integrity Test Report
State LPG Storage No. 2
Operator: Western Refining Company, LP
API: 30-025-35955
Jal Station Field
Lea County, New Mexico, USA

Prepared for:

Western Refining Company, LP

By:

Lonquist Field Service, LLC
Texas Registered Firm No. F-9147
Houston, Texas

May 2016

Executive Summary

Lonquist Field Services, LLC was contracted by Western Refining Company, LP ("Western Refining") to conduct a Mechanical Integrity Test on State LPG Storage No. 2 ("Well No. 2"), operated by Western Refining Company, LP at the Jal Station Field in Lea County, New Mexico. The Nitrogen-Brine Interface Test Method was used for this test. Nitrogen was injected on April 28th, 2016 to achieve the desired interface depth below the casing shoe. The well was allowed to stabilize for approximately 12 hours and on April 29th, 2016 at 09:00 the MIT was initialized with an annulus (nitrogen) pressure of 1,254.25 psig and a tubing (brine) pressure of 457.29 psig with the nitrogen-brine interface at 1,678.5'. The test was finalized on May 2nd, 2016 at 09:00 with an annulus (nitrogen) pressure of 1,245.55 psig and a tubing (brine) pressure of 447.85 psig with the nitrogen-brine interface at 1,678.5'. The calculations yielded a calculated leak rate ("CLR") of 395.09 barrels per year and a Minimum Detectable Leak Rate ("MDLR") of 843.25 barrels per year. The well was tested to a test gradient of 0.80 psi/ft at the 7" cemented casing shoe (1,672'). Considering these results and the guidelines set forth by the Oil Conservation Division of New Mexico, Well No. 2 at the Jal Station Field, at the time of this test, demonstrated the mechanical integrity required for the storage of hydrocarbons.

Reviewed By:
Lonquist Field Service, LLC
Ben H. Bergman, Sr. Staff Engineer

Date Signed: May 31st, 2016
Houston, Texas

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Introduction

Lonquist Field Service, LLC was contracted by Western Refining Company, LP to conduct a Mechanical Integrity Test on State LPG Storage No. 2 ("Well No. 2") at the Jal Station Field in Lea County, New Mexico.

Well No. 2 was tested using the Nitrogen-Brine Interface Test Method (See Appendix A). Typically this procedure begins with an initial injection of nitrogen into the well to check for wellhead and casing leaks. The initial injection is followed by continued injection of nitrogen into the storage well until the interface is located below the casing shoe and a sufficient test pressure has been reached. The interface depth and the nitrogen (annulus) pressure are monitored during the test period. The test is evaluated by calculating the nitrogen mass (volume) at the commencement and completion of the test period. This difference yields an apparent mass (volume) change. As the test occurs over a finite time period, the apparent mass (volume) rate of change can be calculated and linearly forecasted to an annual rate. The annual mass (volume) rate of change is usually expressed in barrels of nitrogen per year (at average well pressure and temperature conditions). The mass (volume) rate of change is subject to the accuracy of the test or Minimum Detectable Leak Rate (MDLR), also expressed in barrels per year.

The following report will outline the mechanical integrity test for Well No. 2. The report includes the cavern and wellbore configuration, temperature logs, and density logs completed during the test.

MIT Report – Western Refining Company, LP
State LPG Storage No. 2

Summary

On April 27th, 2016 at 10:30, wireline and nitrogen units were rigged up and a gauge run, base temperature log, and base density log were completed. At 16:45, nitrogen was injected into Well No. 2 with a target temperature of 75° F. Nitrogen injection continued until the nitrogen-brine interface was measured at a depth of 1,664' at an adequate test pressure. The casing test began on April 27th, 2016 at 18:38 with the nitrogen-brine interface at 1,664' and with an annular (nitrogen) pressure of 943.87 psig and a tubing (brine) pressure of 158.29 psig. The casing test ended with the nitrogen-brine interface at 1,664' and with an annular (nitrogen) pressure of 943.10 psig and a tubing (brine) pressure of 156.70 psig. The 60-minute casing test passed with a stabilizing pressure trend throughout the testing period. Following the casing test, operations were shut down for the night at 21:00.

On April 28th, 2016 at 11:55, nitrogen injection was resumed until the nitrogen-brine interface was measured at a depth of 1,678.5' at an adequate test pressure.

After an approximate 12 hour stabilization period, on April 29th, 2016 at 09:00 the MIT on Well No. 2 was initialized with an annulus (nitrogen) pressure of 1,254.25 psig, a tubing (brine) pressure of 457.29 psig, and with the nitrogen-brine interface at a depth of 1,678.5'. The well was shut in for a 72 hour test period. On May 2nd, 2016 at 09:00 the MIT on Well No. 2 was finalized with an annulus (nitrogen) pressure of 1,245.55 psig, a tubing (brine) pressure of 447.85 psig and with the nitrogen-brine interface at a depth of 1,678.5'. This concluded the MIT on Well No. 2.

Conclusions

The mechanical integrity of Well No. 2 was established with the Nitrogen-Brine Interface Test Method. This test monitored the Nitrogen-Brine Interface for a 72 hour test period. Well No. 2 was initialized with an annulus (nitrogen) pressure of 1,254.25 psig and a tubing (brine) pressure of 457.29 psig and the nitrogen-brine interface at 1,678.5'.

Well No. 2 was finalized with an annulus (nitrogen) pressure of 1,245.55 psig and a tubing (brine) pressure of 447.85 psig and the nitrogen-brine interface at 1,678.5'. Well No. 2 had a test length of 72 hours and a test gradient of 0.80 psi/ft at the 7" cemented casing shoe.

The total gas volume in the annulus and the wellbore was calculated to be 229,396.76 SCF at the start of the test and 227,799.35 SCF at the end of the test for a calculated "decrease" in gas volume of 1,597.41 SCF. The calculated gas volume was based on the measured wellhead pressure, measured wellbore temperature, known casing annulus volume, tubing OD and sonar borehole volumes (Appendix D).

The calculated leak rate ("CLR") was 395.09 barrels per year. Considering the calculations, the calculated leak rate is less than the Minimum Detectable Leak Rate ("MDLR") of 843.25 barrels per year.

At the completion of this test, Well No. 2 exhibited the characteristics of a well that has mechanical integrity as required for hydrocarbon storage, in accordance with industry standards and the guidelines established by the Oil Conservation Division of New Mexico.

Daily Activities

April 27th, 2016

Arrive on location and spot equipment. Hold daily safety meeting and review JSAs. Rig up wireline, crane, and lubricator. Run in hole with 2-1/4" gauge run and tag at 1,938'. Run in hole with wireline and record base temperature and density logs. Rig up fittings on 5-1/2" X 2-7/8" annulus for nitrogen injection. Start nitrogen injection. Injection continued until the nitrogen-brine interface was spotted above the 7" casing shoe at 1,664' for the 60 minute casing test. The test started with an annulus pressure of 943.87 psig and a tubing pressure of 158.29 psig. The test ended with an annulus pressure of 943.10 psig and a tubing pressure of 156.70 psig. The interface at the beginning and end of the test was measured at 1,664'. The pressure trend during the 60 minute casing test showed a stabilization curve with pressure flattening out over the test. The test passed, rig down lubricator and crane, and secure well for the night.

April 28th, 2016

Arrive on location, hold daily safety meeting, and review JSAs. Rig up lubricator and crane. Continue nitrogen injection into the cavern borehole. Bleed-off brine while injecting nitrogen in order to spot the nitrogen-brine interface at 1,678.5' at an adequate test pressure. Rig down lubricator, crane, and nitrogen unit. Secure well and allow to stabilize overnight.

April 29th, 2016

Arrive on location, hold daily safety meeting, and review JSAs. Rig up lubricator and crane. Run down hole with temperature log and initialize test with density log. The nitrogen-brine interface was located at 1,678.5'. Test initialization annulus pressure was 1,254.25 psig and initialization tubing pressure was 457.29 psig. Rig down crane and lubricator. Secure well for the night.

May 2nd, 2016

Arrive on location, hold daily safety meeting, and review JSAs. Rig up lubricator and crane. Run in hole with temperature log and finalize test with density log. The nitrogen-brine interface was located at 1,678.5'. Test finalization annulus pressure was 1,245.55 psig and finalization tubing pressure was 447.85 psig. Rig down crane and lubricator. Secure and return well to Western Refining.

Test Participants

Western Refining Company, LP

Ken Parker.....Project Manager

Lonquist Field Service, LLC

Eric Busch.....Operations Manager

Will George.....Petroleum / Test Engineer

Ben Bergman.....Sr. Staff Engineer

Cased Hole Solutions

Cased Hole Solutions Personnel.....Wireline Operator

Pro Petro Services

Nitrogen Personnel.....Nitrogen Injection

Stone Oilfield Services

Stone Oilfield Personnel.....Pump Truck

Calculations

Minimum Detectable Leak Rate – MDLR

The test sensitivity is defined as the ability of the test calculations and measurements to determine the status of the mechanical integrity of the well and wellbore. The conventional test sensitivity calculation using this test methodology is the Minimum Detectable Leak Rate (MDLR).

$$MDLR = [B_V * L_R * (T_c)] / T_L$$

Where:

- B_v = 27.72 bbls/ft (APPENDIX D less Tubing)
- L_R = 0.25 feet
- T_c = 365 days/year
- T_L = 3 day
- **MDLR = 843.25 bbls/year**

Therefore: (27.72 x 0.25 x 365)/3 = 843.25 bbls/year*
*Hand calculations may yield different final MDLR due to rounding.

Volume Calculations – Annular Space & Borehole

Using the methodology outlined in the MIT procedure the following volumes were calculated:

Initial Wellbore Volume ($V_{I(Borehole)}$)

- Annulus Pressure – 1,254.25 psig
- Tubing Pressure – 457.29 psig
- Wellbore Temperature – Logged (APPENDIX F)
- Volume
  - 5-1/2" x 2-7/8" Annulus – 0.01577 bbls/ft
  - 7" x 2-7/8" Annulus – 0.03246 bbls/ft
  - Borehole – APPENDIX D less 2-7/8" OD Tubing

$$(V_I) = \sum_o^{I/F} (N_2)_i$$

$V_{I(Borehole)}$ = 229,396.76 SCF

Final Wellbore Volume ($V_{F(Borehole)}$)

- Annulus Pressure – 1,245.55 psig
- Tubing Pressure – 447.85 psig
- Wellbore Temperature – Logged (APPENDIX F)
- Volume
  - 5-1/2" x 2-7/8" Annulus – 0.01577 bbls/ft
  - 7" x 2-7/8" Annulus – 0.03246 bbls/ft
  - Borehole – APPENDIX D less 2-7/8" OD Tubing

$$(V_F) = \sum_o^{I/F} (N_2)_i$$

$V_{F(Borehole)}$ = 227,799.35 SCF

Borehole Volume Change:

$$(\Delta V)_{STP(Borehole)} = (\Delta V)_{I(Borehole)} - (\Delta V)_{F(Borehole)}$$

$$(\Delta V)_{STP(Borehole)} = 1{,}597.41 SCF$$

The calculated volume/mass change is based on standard temperature and pressure and to evaluate the test results against the MDLR the calculated volume/mass change is converted to downhole conditions with the following equation:

$$(\Delta V_{WB}) = \left(\frac{[(Z_A)*(T_A)*R*(\Delta V)_{STP}]}{[(P_A)*N_{GC}]} \right)$$

Where:

(Z_A)	=	1.00264
(T_A)	=	534.36 ◦R
R	=	Specific Gas Constant
$(\Delta V)_{STP}$	=	1,597.41 SCF
(P_A)	=	1,303.03 psi
N_{GC}	=	Nitrogen Gas Conversion (13.80 SCF = 1 lb)
(ΔV_{WB})	=	**6.08 ft³/day**

To calculate an annual volume change to compare to the MDLR the following calculations were completed:

$$(\Delta V_{ANNUAL}) = (\Delta V_{WB})*365(day/year)$$

Where:

(ΔV_{WB})	=	6.08 ft³/day
1 year	=	365 days
(ΔV_{ANNUAL})	=	**2,218.17 ft³/yr**

Where:

(ΔV_{ANNUAL})	=	2,218.17 ft³/yr
1 bbl	=	5.6146 ft³
CLR (bbls/year)	=	(ΔV_{ANNUAL}) / 5.6146 ft³
Calculated Leak Rate	=	**395.09 bbls/year***

***Hand calculations may yield different final CLR due to rounding.**

Well Data Sheet

TEST INFORMATION AND RESULTS

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

WELL INFORMATION

Cemented Casing		
Casing Size	7	inches
Casing ID	6.456	inches
Casing Weight	20.00	lbs/ft
Grade	J-55	
Depth	1672	feet

Casing Liner		
Casing Size	5 1/2	inches
Casing ID	4.950	inches
Casing Weight	15.50	lbs/ft
Grade	J-55	
Depth	1656	feet

Hanging String No. 1		
Casing Size	2 7/8	inches
Casing ID	2.441	inches
Casing Weight	6.50	lbs/ft
Grade	J-55	
Depth	1954	feet

Hanging String No. 2		
Casing Size		inches
Casing ID		inches
Casing Weight		lbs/ft
Grade		
Depth		feet

Cavern		
Cavern Size	144,442.9	bbls
Compressibility	0.44	bbls/psi
Cavern TD	1990	feet

FINAL TEST INFORMATION

Effective Casing Shoe	1672	feet	Casing Shoe Pressure (avg)	1338.20	psi
Test Gradient	0.80	psi/ft	Interface Pressure (avg)	1338.49	psi
Brine Specific Gravity	1.2		Surface Tubing Pressure (avg)	452.57	psi
Nitrogen Temperature (avg)	75	deg F	Surface Annulus Pressure (avg)	1249.90	psi
Interface Depth	1678.5	feet	Pressure Increase	-8.70	psi
Gas Compressibility (avg)	1.00264		Conversion	14.70	psi

Volume		
Annular Volume No. 1	0.016	bbls/ft
Annular Volume No. 2	0.032	bbls/ft
Surface to Liner Shoe	26.12	bbls
Liner Shoe to Casing Shoe	0.52	bbls
Casing Shoe to Interface	427.41	bbls
Total	454.05	bbls

Nitrogen		
Surface to Casing Shoe (avg)	13088.45	SCF
Casing Shoe to Interface (avg)	215509.61	SCF
Total (avg)	228598.06	SCF
Brine		
Cavern Pre-Pressure	115	psi
Brine Injection	N/A	bbls

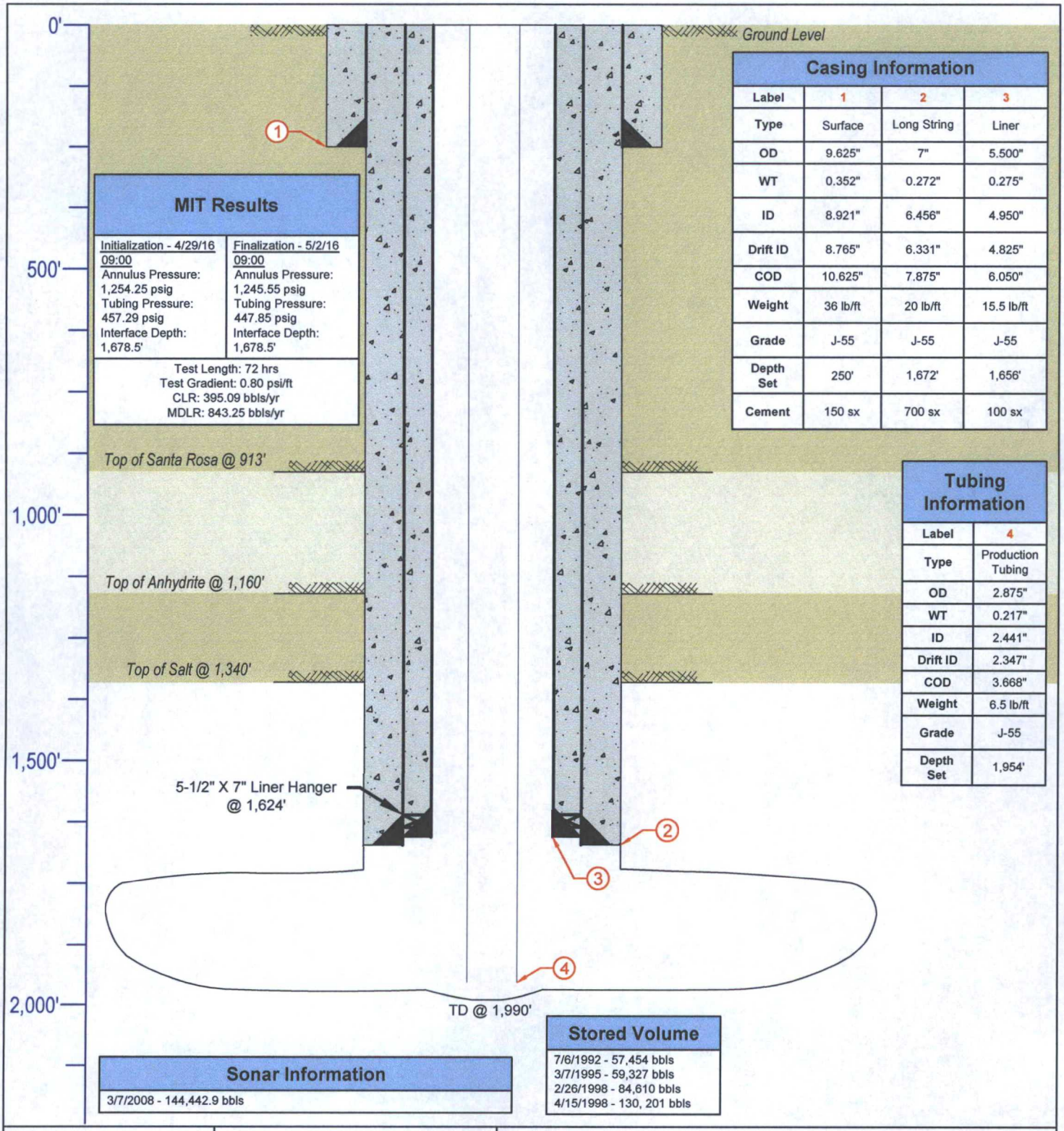
TEST RESULTS

Test Initialization Information		
Date / Time	4/29/16 9:00	
Tubing Pressure	457.29	psig
Annulus Pressure	1,254.25	psig
Wellbore Temperature (avg)	75	deg F
Nitrogen/Brine Interface	1678.5	feet

Test Finalization Information		
Date / Time	5/2/16 9:00	
Tubing Pressure	447.85	psig
Annulus Pressure	1,245.55	psig
Wellbore Temperature (avg)	75	deg F
Nitrogen/Brine Interface	1678.5	feet

Test Results					
MDLR	843.25	bbls/yr	Test Length	72.00	hours
Calculated Volume Change	395.09	bbls/yr	Test Length	3	days
Test Gradient	0.80	psi/ft	Logging Resolution	0.25	feet
Tubing Pressure Change	9.4	psi	Wireline TD	1938	feet
Annulus Pressure Change	8.7	psi			

MIT/Well Schematic



Casing Information

Label	1	2	3
Type	Surface	Long String	Liner
OD	9.625"	7"	5.500"
WT	0.352"	0.272"	0.275"
ID	8.921"	6.456"	4.950"
Drift ID	8.765"	6.331"	4.825"
COD	10.625"	7.875"	6.050"
Weight	36 lb/ft	20 lb/ft	15.5 lb/ft
Grade	J-55	J-55	J-55
Depth Set	250'	1,672'	1,656'
Cement	150 sx	700 sx	100 sx

MIT Results

Initialization - 4/29/16 09:00	Finalization - 5/2/16 09:00
Annulus Pressure: 1,254.25 psig	Annulus Pressure: 1,245.55 psig
Tubing Pressure: 457.29 psig	Tubing Pressure: 447.85 psig
Interface Depth: 1,678.5'	Interface Depth: 1,678.5'

Test Length: 72 hrs
Test Gradient: 0.80 psi/ft
CLR: 395.09 bbls/yr
MDLR: 843.25 bbls/yr

Tubing Information

Label	4
Type	Production Tubing
OD	2.875"
WT	0.217"
ID	2.441"
Drift ID	2.347"
COD	3.668"
Weight	6.5 lb/ft
Grade	J-55
Depth Set	1,954'

Stored Volume

7/6/1992 - 57,454 bbls
3/7/1995 - 59,327 bbls
2/26/1998 - 84,610 bbls
4/15/1998 - 130, 201 bbls

Sonar Information

3/7/2008 - 144,442.9 bbls

LONQUIST & CO. LLC
PETROLEUM ENGINEERS | ENERGY ADVISORS
AUSTIN | WICHITA
HOUSTON | CALGARY

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Western Refining Company, LP

State LPG Well No. 2 - MIT Results

Country: USA	**State/Province:** New Mexico	**County/Parish:** Lea
Survey/STR: M-32-23S-37E	**Site:** Jal	**Status:** Storage
API No.: 30-025-35955	**Field:**	**Ground Elevation:** 3,303'
Serial No.:	**Project No:**	**Date:** 5/23/2016
Drawn: WHG	**Reviewed:** ETB	**Approved:** BHB
Rev No:	**Notes:**	

Appendix A – MIT Test Procedure

LONQUIST FIELD SERVICE	**WELL TEST**	**Project No.:**
	Western Refining Company, LP **Well No. 2** **Mechanical Integrity Test**	**Date: March 2016**
		Page: 1 of 11

Well: No. 2	**State:** New Mexico	**County:** LEA	**Field:** Jal Station
API: 30-025-35955	**Oper:** Western Refining Company,LP	**Location:** Jal	**Status:** State LPG Well

INTRODUCTION

Well No. 2 is operated by Western Refining Company, LP located in the Jal Station Field in Lea County, New Mexico. The purpose of the Mechanical Integrity Test (MIT) procedure is to test the integrity of the underground storage system that includes the cavern, cemented casing, and wellhead to determine if the system demonstrates the mechanical integrity required to support hydrocarbon storage operations.

In accordance with the Oil Conservation Divisions of New Mexico Well No 1 is undergoing an MIT to remain compliant.

The test procedure will consist of the following basic steps:

1. Pre-pressure the cavern to the required pre pressure.
    - Annulus Pressure: **-716 psig**
        - NOTE: Brine will need to be bled off while pumping nitrogen into the wellbore.
    - 0.75 psi/ft final test gradient at the effective casing shoe (1,672').
2. Complete pre-test density and temperature logs.
3. Inject nitrogen into Well No. 2 and monitor nitrogen/brine interface location to place above cemented casing to complete a preliminary test on the cemented casing.
4. Inject nitrogen into Well No. 2 and monitor nitrogen/brine interface location to place interface below the effective cemented casing shoe.
5. Monitor wellhead pressures, wellbore temperature, and the nitrogen/brine interface location during the specified test period.
6. Complete and submit MIT report to Western Refining Company, LP and the Oil Conservation Division of New Mexico within 45 days.
7. Place Well No. 2 in operation and return to Western Refining personnel.

The test procedure includes the following information:

- Nitrogen/Brine Interface Test Planning Sheet
- Wellbore Schematic
- Contact Information
- 2008 Sonar Data

Well Preparation

1. Wellhead should be isolated from all surface piping during the test. This may include blind flanges, skillet flanges, and 1" or 2" test flanges.
    a. Wellhead should keep the ability to bleed excess brine pressure back into surface system during the test.
2. Install pressure recording equipment on wellhead. Pressure equipment should be able to record wellhead pressures and wellhead temperatures during the test period. Additional equipment to measure the nitrogen stream injected into the well will be necessary.
    a. All equipment calibration certifications to be provided with final reports.
3. Wellhead configuration should permit the use of a wireline lubricator and logging tools.
4. Pre-pressure the cavern to predetermined pressure with saturated brine
    a. See MIT Data Sheet
5. Wellhead pressure should be stable prior to starting the test.
    a. Stable wellhead pressure – Decline less than 10 psi/day

Well Injection Phase

6. Move in and rig up wireline unit, logging tools, pressure equipment, and nitrogen services.
7. Run CCL and a sinker bar as a gauge run to ensure density tools will pass through the tubing.
8. Complete base density log and wellbore temperature log
    a. Base Temperature Log – (0' –TD)
    b. Base Density Log – (TD' – 200' above effective casing shoe depth)
    c. Density logs should include: tubing collars, effective casing shoe, and approved logging scales.
    d. All depths are approximate
9. Start Nitrogen Injection at a slow rate (<500 SCFM). Nitrogen temperature should be regulated to the average wellbore temperature.
10. Monitor the nitrogen/brine interface and wellbore pressures to locate the interface above the casing shoe and conduct a preliminary casing test.
    a. Casing Test – Minimum of 60 minutes
    b. Monitor and record wellhead pressures and interface at the start and completion of the test
11. Continue nitrogen injection and monitor the nitrogen/brine interface and wellbore pressures to locate the nitrogen/brine interface below the effective casing shoe. The targeted gradient is 0.75 psi/ft at the effective casing shoe and cannot exceed a test pressure gradient of 0.81 psi/ft at the effective casing shoe at any time.

12. After nitrogen/brine interface is located sufficiently below the cemented casing shoe stop nitrogen injection and shut well in for a short stabilization period.

13. Shut in for 30 minutes – Monitor pressures, interface location, and check wellhead for possible leak paths.

14. Complete post injection density logs
    a. Post Injection Density Log – (TD' – 200' above effective casing shoe).
    b. Record wellhead pressures.
    c. Density logs should include: tubing collars, nitrogen/brine interface, production casing shoe, and approved logging scales.
    d. All depths are approximate

15. Remove logging tools and shut well for the stabilization period.

16. Complete pre-test calculations based on wellhead pressure measurements, nitrogen volume measurements, wellbore temperatures, and interface locations.
    a. Refer to Test Calculations Section

17. MIRU sonar tools and perform a sonar survey on the cavern
    a. Shoot the roof of the cavern with upshots
    b. Shoot the floor of the cavern with downshots
    c. Record data every 10'

Test Initialization

18. Move in and rig up wireline unit, logging tools, and pressure equipment.

19. Complete initial density log and wellbore temperature log
    a. Base Temperature Log – (0' – TD')
    b. Initial Density Log – (TD' – 200' above effective casing shoe)
    c. Density logs should include: tubing collars, nitrogen/brine interface, production casing shoe, and approved logging scales.
    d. All depths are approximate
20. Shut well in for test period – Minimum of 24 hours

Test Finalization

21. After planned test duration, move in and rig up wireline unit, logging tools, and pressure equipment.
    a. Complete final density log and wellbore temperature log
    b. Final Temperature Log – (0' – TD')
    c. Final Density Log – (TD' – 200' above effective casing shoe)
    d. Density logs should include: tubing collars, nitrogen/brine interface, production casing shoe, and approved logging scales.
    e. All depths are approximate

22. Determine if the test is complete based on results or if the test should be extended. Repeat Steps 15 - 17 if required.

Nitrogen/Brine Interface Test Calculations

The test methodology proposed in this procedure is developed using the industry standard nitrogen/brine interface test method.

The wellhead pressures and temperature, wellbore temperatures, nitrogen volumes, and interface location will be recorded throughout the test period and will allow for the calculation of the borehole volumes, test sensitivity, minimum test durations, and final test calculations.

All test calculations are based on the following measured parameters: wellhead pressure, nitrogen volumes, annular casing unit volume, wellbore temperatures, and interface locations. In addition to the measured parameters, the following calculated parameters are important in completing the test: unit borehole volume, MDLR, and test length.

To evaluate the test the calculated nitrogen volume/mass at the start of the test is compared to the calculated nitrogen volume/mass at the end of the test. This rate of volume change and it's comparison to the test sensitivity is one of the components in determining the final results of the MIT.

TEST SENSITIVITY AND TEST LENGTH

Test sensitivity calculations are the functions of three factors:

Casing volume – Calculated
Log Resolution – Recommended: 5":100' logging scale
Minimum test duration – 24 hours

The test sensitivity is defined at the ability of the test calculations and measurements to determine the status of the mechanical integrity of the well and wellbore. The conventional test sensitivity calculation using this test methodology is the Minimum Detectable Leak Rate (MDLR).

$$MDLR = {[B_V * L_R * (T_c)]}/{T_L}$$

Where:

MDLR	=	Minimum Detectable Leak Rate (bbl/year)
B_v	=	Borehole Volume (bbls/ft)
L_R	=	Log Resolution (feet)
T_c	=	Time Constant (365 days/year)
T_L	=	Test Length (days)

Using the MDLR method a reasonable and acceptable test accuracy and sensitivity can be calculated for the Mechanical Integrity Test. The MDLR calculation is based on downhole measurements of the test conditions.

The MDLR must be less than 1000 bbl/year for the designated test period. The length of the test must a minimum of 24 hours and sufficient in length to keep the MDLR below 1000 bbl/year and allow for a proper evaluation of the well test.

TEST EVALUATIONS

The volume/mass of nitrogen located in the wellbore can be affected by following: temperature stabilization, cavern leaching/creep, and volume changes. Using P-V-T gas calculations, any changes in the volume/mass of the nitrogen in the wellbore can be evaluated based on wellbore temperature changes, pressure changes, and/or wellbore leakage.

Pressure Calculations

The average wellbore pressure is calculated based on the wellhead surface pressure, wellbore temperature, and depth of the specific interval. The following equation is used to calculate the average wellbore pressure

$$(P_A)_i = (P_A)_{i-1}\left[1+\left(\frac{D}{(R)(Z_A)_i(T)_i}\right)\right]$$

Where:

$(P_A)_i$ = Pressure @ Depth Interval (Calculated) (psia)
$(P_A)_{i-1}$ = Pressure @ Previous Depth Interval (Calculated) (psi)
D = Depth Interval (ft)
$(Z_A)_i$ = Gas Compressibility Factor @ Depth Interval
R = Specific Gas Constant
$(T)_i$ = Wellbore Temperature (◦R)

Nitrogen Calculations

The following calculation is used to calculate the volume/mass of nitrogen for specific intervals over the entire wellbore at the start and end of the test period:

$$(N_2)_i = \left(\frac{[(P_A)_i * (B_v)_i]}{[(Z_A)_i * (T_A)_i * R]}\right) * N_{GC}$$

Where:

$(N_2)_i$ = Nitrogen Volume (SCF)
$(P_A)_i$ = Average Wellbore Pressure (psi)
$(B_v)_i$ = Wellbore Volume (ft^3)

$(Z_A)_i$ = Gas Compressibility Factor

$(T_A)_i$ = Wellbore Temperature (◦R)

R = Specific Gas Constant

N_{GC} = Nitrogen Gas Conversion (13.8 SCF = 1 lb)

Upon completion of each specific volume/mass calculation the sum of the each interval is calculated to determine the volume/mass of nitrogen in the wellbore at the beginning of the test. After the test is complete the calculation and summation is repeated to determine the final test results.

The following equations represent the summation of the intervals to the nitrogen/brine interface at the start and completion of the test:

$$(V_I) = \sum_o^{I/F} (N_2)_i$$

$$(V_F) = \sum_o^{I/F} (N_2)_i$$

The results of the beginning and completion of the test are compared and evaluated to determine the change in nitrogen volume during the test period. The following equation is used for the comparison:

$$(\Delta V)_{STP} = (V_I) - (V_F)$$

The calculated volume/mass change is based on standard temperature and pressure and to evaluate the test results against the MDLR the calculated volume/mass change is converted to downhole conditions with the following equation:

$$(\Delta V_{WB}) = \left(\frac{[(Z_A) * (T_A) * R * (\Delta V)_{STP}]}{[(P_A) * N_{GC}]} \right)$$

Where:

(ΔV_{WB}) = Nitrogen Volume Change (ft^3) – Wellbore Conditions

(Z_A) = Average Gas Compressibility Factor for Test Period

(T_A) = Average Wellbore Temperature (◦R) for Test Period

R = Specific Gas Constant

$(\Delta V)_{STP}$ = Nitrogen Volume Change (SCF) – Standard Conditions

(P_A) = Average Wellbore Pressure for Test Period (psi)

N_{GC} = Nitrogen Gas Conversion (13.8 SCF = 1 lb)

The change in wellbore volume for the test period is converted into a calculated annual volume change. The following equation determines this volume change:

$$(\Delta V_{ANNUAL}) = \frac{[(\Delta V_{WB}) * 24(hr/day) * 365(day/yr)]}{T_L}$$

Where:

(ΔV_{ANNUAL}) = Calculated Volume Change (bbls/year)

(ΔV_{WB}) = Nitrogen Volume Change (ft^3) – Wellbore Conditions

(T_L) = Test Length (hrs)

A positive change in wellbore volume indicates a calculated loss of nitrogen from the wellbore during the test period. A negative change in wellbore volume indicates a calculated increase (apparent nitrogen influx) in nitrogen volume during the test period.

Pass/Fail Criteria

Test results are evaluated for a successful test using the following criteria:

- MDLR less than 1000 bbls/day
- Calculated Annual Volume Change less than the MDLR
- Pressure response, wellbore temperature, and interface movement should respond in a way that represents the cavern has mechanical integrity

Test Reporting

A written report will be prepared within 45 days of completion and submitted to the Oil Conservation Division of New Mexico. The report will include the test procedures, test chronology, test results and conclusions, wireline logs, pressure information, and all supporting documentation.

LONQUIST FIELD SERVICE	**WELL TEST**	**Project No.:**
	Western Refining Company, LP **Well No. 2** **Mechanical Integrity Test**	**Date: March 2016**
		Page: 8 of 11

Well: No. 2	**State:** New Mexico	**County:** LEA	**Field:** Jal Station
API: 30-025-35955	**Oper:** Western Refining Company,LP	**Location:** Jal	**Status:** State LPG Well

TEST PLANNING SHEET

Well Name:	Well No. 2
Operator:	Western Refinery
State:	New Mexico
County:	Lea
Field:	Jal Station
API No:	30-025-35955

WELL INFORMATION

Cemented Casing			Casing Liner		
Casing Size	7	inches	Casing Size	5 1/2	inches
Casing ID	6.456	inches	Casing ID	4.95	inches
Casing Weight	20	lbs/ft	Casing Weight		lbs/ft
Grade	J-55		Grade		
Depth	1672	feet	Depth	1624	feet

Hanging String No. 1			Hanging String No. 2		
Casing Size	2 7/8	inches	Casing Size		inches
Casing ID	2.441	inches	Casing ID		inches
Casing Weight	6.5	lbs/ft	Casing Weight		lbs/ft
Grade	J-55		Grade		
Depth	1954	feet	Depth		feet

Cavern		
Cavern Size	144,442.9	bbls
Compressibility	0.44	bbls/psi
Cavern TD	1900	feet

TEST INFORMATION

Effective Casing Shoe	1672	feet	Casing Shoe Pressure	1254.00	psig
Test Gradient	0.75	psi/ft	Interface Pressure	1254.44	psig
Brine Specific Gravity	1.2		Surface Tubing Pressure	380.47	psig
Nitrogen Temperature	65	deg F	Surface Annulus Pressure	1184.75	psig
Interface Depth	1682	feet	Pressure Increase	1096.11	psi
Gas Compressibility	0.9998		Conversion	14.70	psi

Volume			Nitrogen		
Annular Volume No. 1	0.016	bbls/ft	Surface to Casing Shoe	12769.16	SCF
Annular Volume No. 2	0.032	bbls/ft	Casing Shoe to Interface	218761.7	SCF
Surface to Liner Shoe	25.615	bbls	Total	231530.8	SCF
Liner Shoe to Casing Shoe	1.56	bbls	**Brine**		
Casing Shoe to Interface	452.60	bbls	Cavern Pre-Pressure	-715.64	psig
Total	479.77	bbls	Brine Injection	-313.24	bbls

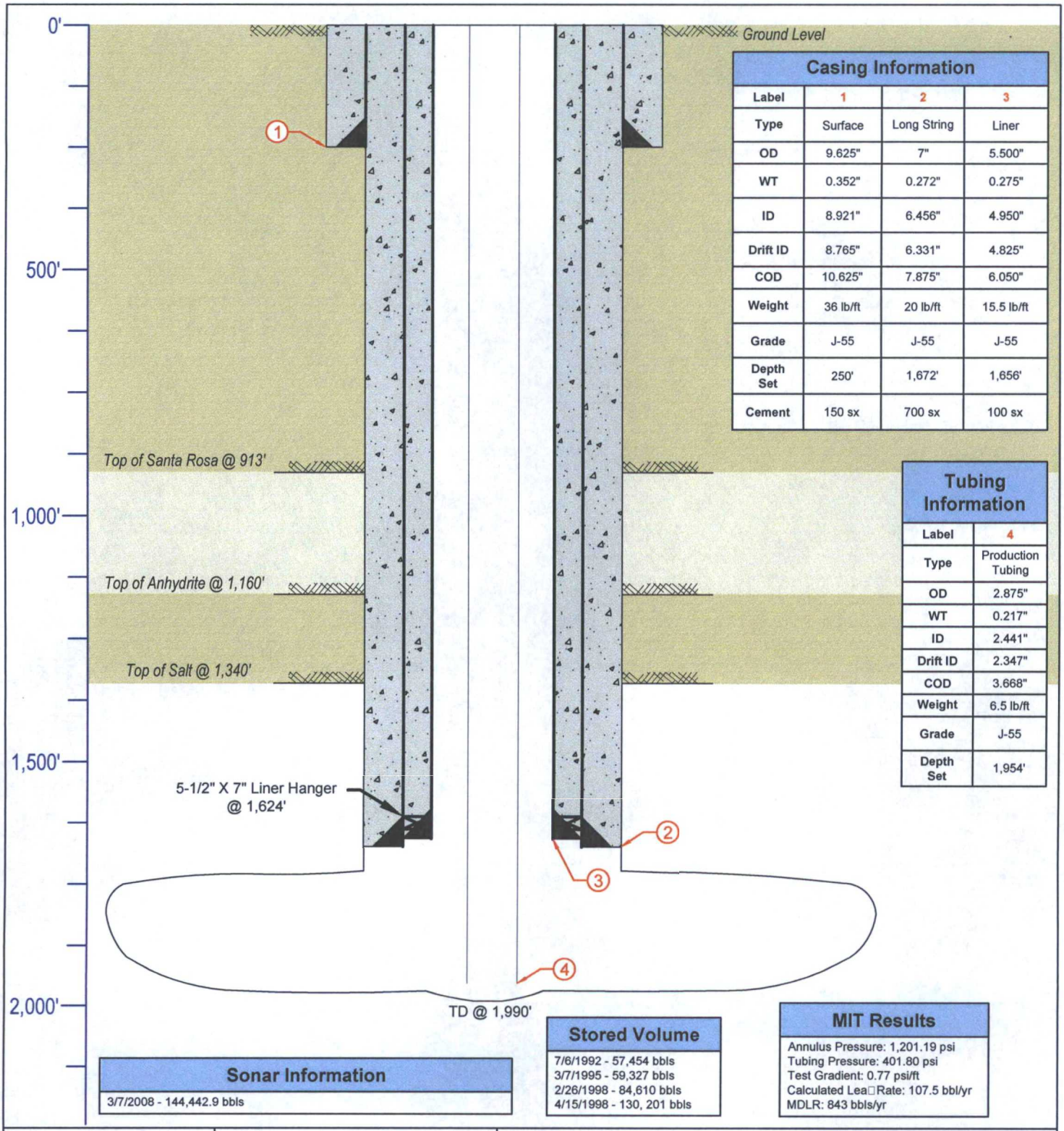
PREPARED BY	DATE	APPROVED BY	DATE	CLIENT APPROVAL	DATE	Lonquist Field Service, LLC
TMH	3/1/2016	ETB	3/1/2016			Texas Registration No. F-9147

LONQUIST FIELD SERVICE	WELL TEST	Project No.:
	Western Refining Company, LP Well No. 2 Mechanical Integrity Test	Date: March 2016
		Page: 9 of 11

Well: No. 2	**State:** New Mexico	**County:** LEA	**Field:** Jal Station
API: 30-025-35955	**Oper:** Western Refining Company,LP	**Location:** Jal	**Status:** State LPG Well

WELL SCHEMATIC

PREPARED BY	DATE	APPROVED BY	DATE	CLIENT APPROVAL	DATE	Lonquist Field Service, LLC
TMH	3/1/2016	ETB	3/1/2016			Texas Registration No. F-9147



Casing Information

Label	1	2	3
Type	Surface	Long String	Liner
OD	9.625"	7"	5.500"
WT	0.352"	0.272"	0.275"
ID	8.921"	6.456"	4.950"
Drift ID	8.765"	6.331"	4.825"
COD	10.625"	7.875"	6.050"
Weight	36 lb/ft	20 lb/ft	15.5 lb/ft
Grade	J-55	J-55	J-55
Depth Set	250'	1,672'	1,656'
Cement	150 sx	700 sx	100 sx

Tubing Information

Label	4
Type	Production Tubing
OD	2.875"
WT	0.217"
ID	2.441"
Drift ID	2.347"
COD	3.668"
Weight	6.5 lb/ft
Grade	J-55
Depth Set	1,954'

Sonar Information

3/7/2008 - 144,442.9 bbls

Stored Volume

7/6/1992 - 57,454 bbls
3/7/1995 - 59,327 bbls
2/26/1998 - 84,610 bbls
4/15/1998 - 130, 201 bbls

MIT Results

Annulus Pressure: 1,201.19 psi
Tubing Pressure: 401.80 psi
Test Gradient: 0.77 psi/ft
Calculated Lea□Rate: 107.5 bbl/yr
MDLR: 843 bbls/yr

LONQUIST & CO. LLC
PETROLEUM ENGINEERS | ENERGY ADVISORS
AUSTIN | WICHITA
HOUSTON | CALGARY

Texas License F-8952

3345 Bee Cave Road, Suite 201
Austin, Texas 78746
Tel: 512.732.9812
Fax: 512.732.9816

Western Refining Company, LP

State LPG Well No. 2

Country: USA	**State/Province:** New Mexico	**County/Parish:** Lea
Survey/STR: M-32-23S-37E	**Site:** Jal	**Status:** Storage
API No.: 30-025-35955	**Field:**	**Ground Elevation:** 3,303'
Serial No.:	**Project No:**	**Date:** 3/1/2016
Drawn: MMC	**Reviewed:**	**Approved:**
Rev No:	**Notes:**	

CONTACT INFORMATION

Well Owner

Western Refining
PO Box 1345
Jal, New Mexico 88252

- Ken Parker – Site Manager
  - Telephone – (505) 395-2632
  - Mobile – (915) 471-1607
  - Email – ken.parker@westernrefining.com

Engineering Consultants

Lonquist Field Service, LLC
1001 McKinney, Suite 1650
Houston, Texas 77002

- Eric Busch – Senior Vice President
  - Telephone – (832) 216-0785
  - Fax – (713) 559-9959
  - Email – eric@lonquist.com

- Tyler Hendrickson – Petroleum Engineer
  - Telephone – (713) 559 9988
  - Fax – (713) 559-9959
  - Email – tyler@lonquist.com

LONQUIST FIELD SERVICE	WELL TEST	Project No.:
	Western Refining Company, LP Well No. 2 Mechanical Integrity Test	Date: March 2016
		Page: 11 of 11

Well: No. 2	**State:** New Mexico	**County:** LEA	**Field:** Jal Station
API: 30-025-35955	**Oper:** Western Refining Company,LP	**Location:** Jal	**Status:** State LPG Well

2008 SONAR VOLUME TABLE

PREPARED BY	DATE	APPROVED BY	DATE	CLIENT APPROVAL	DATE	Lonquist Field Service, LLC
TMH	3/1/2016	ETB	3/1/2016			Texas Registration No. F-9147

2m-0803.inv
SONARWIRE GLOBAL, LLC
Depth versus Volume

WESTERN REFINING
STORAGE WELL NO. 2

JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1673	465.2	465.2	82.9	82.9
1674	441.5	906.7	78.6	161.5
1675	418.8	1325.5	74.6	236.1
1676	388.9	1714.4	69.3	305.3
1677	360.4	2074.8	64.2	369.5
1678	247.4	2322.2	44.1	413.6
1679	155.7	2477.9	27.7	441.3
1680	53.9	2531.8	9.6	450.9
1681	4.9	2536.8	0.9	451.8
1682	4.5	2541.2	0.8	452.6
1683	4.0	2545.2	0.7	453.3
1684	4.3	2549.5	0.8	454.1
1685	4.6	2554.1	0.8	454.9
1686	116.1	2670.2	20.7	475.6
1687	376.8	3047.0	67.1	542.7
1688	363.6	3410.7	64.8	607.5
1689	351.3	3762.0	62.6	670.0
1690	345.1	4107.1	61.5	731.5
1691	339.5	4446.5	60.5	792.0
1692	354.1	4800.6	63.1	855.0
1693	369.9	5170.5	65.9	920.9
1694	380.2	5550.7	67.7	988.6
1695	391.3	5942.0	69.7	1058.3
1696	387.3	6329.3	69.0	1127.3
1697	383.9	6713.2	68.4	1195.7
1698	411.2	7124.4	73.2	1268.9
1699	440.3	7564.8	78.4	1347.3
1700	421.5	7986.3	75.1	1422.4
1701	403.4	8389.6	71.8	1494.3
1702	391.9	8781.5	69.8	1564.0
1703	381.1	9162.6	67.9	1631.9
1704	373.9	9536.5	66.6	1698.5
1705	367.5	9904.0	65.5	1764.0
1706	395.9	10299.9	70.5	1834.5
1707	426.5	10726.4	76.0	1910.5
1708	442.4	11168.7	78.8	1989.2
1709	458.8	11627.6	81.7	2071.0
1710	460.2	12087.7	82.0	2152.9
1711	462.4	12550.1	82.4	2235.3
1712	451.3	13001.4	80.4	2315.6
1713	441.0	13442.4	78.6	2394.2
1714	437.7	13880.1	78.0	2472.2
1715	436.9	14317.0	77.8	2550.0
1716	130.0	14447.0	23.2	2573.1
1717	3.7	14450.7	0.7	2573.8
1718	4.3	14455.1	0.8	2574.6
1719	5.1	14460.1	0.9	2575.5
1720	5.5	14465.6	1.0	2576.4
1721	6.0	14471.6	1.1	2577.5
1722	4.9	14476.5	0.9	2578.4
1723	4.0	14480.5	0.7	2579.1
1724	72.1	14552.6	12.8	2591.9

Appendix B – Injection Pressure Data

Nitrogen Injection

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

Flow Conditions

	Annulus Gauge		Tubing Gauge		Flow Conditions
	Pressure	Temp	Pressure	Temp	Temp
Date / Time	psig	deg F	psig	deg F	deg F
4/27/16 16:43	94.84	90.50	118.46	91.43	95.90
4/27/16 16:50	207.30	87.92	119.54	89.77	101.88
4/27/16 17:00	332.50	87.39	126.17	88.35	100.38
4/27/16 17:10	455.39	87.96	132.66	88.80	97.50
4/27/16 17:20	554.21	88.12	137.62	89.02	94.72
4/27/16 17:30	638.65	87.68	142.05	88.59	91.51
4/27/16 17:40	713.40	87.38	145.89	88.38	88.71
4/27/16 17:50	784.22	87.76	149.62	88.59	87.18
4/27/16 18:00	848.17	87.66	152.97	88.43	86.53
4/27/16 18:10	909.59	86.67	156.11	87.19	86.21
4/27/16 18:20	944.19	86.44	158.04	87.10	85.14
4/27/16 18:30	944.00	86.16	157.49	86.84	-76.00
4/27/16 18:40	943.80	83.46	157.56	84.86	83.48
4/27/16 18:50	943.59	84.71	157.21	85.47	82.89
4/27/16 19:00	943.53	83.74	157.10	85.35	82.22
4/27/16 19:10	943.37	83.89	157.10	84.84	81.31
4/27/16 19:20	943.22	83.86	156.85	84.53	80.50
4/27/16 19:30	943.17	82.99	156.77	83.56	79.62
4/27/16 19:40	943.08	81.81	156.81	82.28	78.84
4/27/16 19:50	942.97	79.87	156.56	80.03	78.01
4/27/16 20:00	942.74	77.72	156.25	77.74	77.12
4/27/16 20:10	942.70	75.86	2.26	75.76	76.21
4/27/16 20:20	942.64	74.33	155.70	74.24	75.24
4/27/16 20:30	942.68	71.62	155.62	71.93	74.14
4/27/16 20:40	942.57	69.80	155.56	69.80	73.04
4/27/16 20:50	942.50	68.16	155.49	68.04	71.87
4/27/16 21:00	942.44	66.66	155.43	66.46	70.72
4/27/16 21:10	942.33	65.28	155.37	65.03	69.60
4/27/16 21:20	942.31	63.89	155.31	63.64	68.46
4/27/16 21:30	942.24	62.89	155.26	62.61	67.35
4/27/16 21:40	942.17	62.17	155.21	61.91	66.41
4/27/16 21:50	942.05	61.38	155.16	61.14	65.48
4/27/16 22:00	942.01	60.78	155.13	60.52	64.63
4/27/16 22:10	941.95	60.27	155.09	60.00	63.77
4/27/16 22:20	941.88	59.84	155.05	59.56	62.75
4/27/16 22:30	941.86	60.00	155.02	59.72	61.95
4/27/16 22:40	941.74	60.37	154.98	60.23	61.48
4/27/16 22:50	941.71	59.65	154.95	59.47	60.80
4/27/16 23:00	941.68	58.96	154.90	58.74	60.19
4/27/16 23:10	941.64	58.40	154.86	58.16	59.61
4/27/16 23:20	941.59	57.93	154.82	57.68	59.13
4/27/16 23:30	941.54	57.40	154.78	57.16	58.47
4/27/16 23:40	941.52	56.91	154.75	56.66	57.86

Nitrogen Injection

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

Flow Conditions

	Annulus Gauge		Tubing Gauge		Flow Conditions
	Pressure	Temp	Pressure	Temp	Temp
Date / Time	psig	deg F	psig	deg F	deg F
4/27/16 23:50	941.46	56.63	154.71	56.41	57.55
4/28/16 0:00	894.75	56.03	154.68	55.83	57.07
4/28/16 0:10	941.42	54.52	154.63	54.30	56.22
4/28/16 0:20	941.37	53.64	154.59	53.35	55.60
4/28/16 0:30	941.33	53.53	154.57	53.24	55.20
4/28/16 0:40	941.26	53.82	154.55	53.57	54.94
4/28/16 0:50	941.18	53.47	154.51	53.26	54.49
4/28/16 1:00	941.16	53.02	154.49	52.78	53.93
4/28/16 1:10	941.13	52.58	154.45	52.34	53.43
4/28/16 1:20	941.08	52.17	154.41	51.91	53.05
4/28/16 1:30	941.03	51.68	154.39	51.44	52.72
4/28/16 1:40	940.99	51.37	154.36	51.12	52.40
4/28/16 1:50	940.94	51.40	154.35	51.16	52.29
4/28/16 2:00	940.88	51.01	154.31	50.79	51.93
4/28/16 2:10	940.84	50.48	154.27	50.26	51.51
4/28/16 2:20	940.86	49.42	154.23	49.21	50.89
4/28/16 2:30	940.80	48.82	154.20	48.53	50.41
4/28/16 2:40	940.74	48.96	154.18	48.67	50.20
4/28/16 2:50	940.68	48.99	154.16	48.72	49.96
4/28/16 3:00	940.64	48.94	154.14	48.68	49.76
4/28/16 3:10	940.60	48.80	154.12	48.57	49.52
4/28/16 3:20	940.56	48.71	154.09	48.47	49.24
4/28/16 3:30	940.53	48.84	154.07	48.62	49.03
4/28/16 3:40	940.49	49.31	154.06	49.12	48.81
4/28/16 3:50	940.43	50.30	154.05	50.18	48.72
4/28/16 4:00	940.40	51.15	154.05	51.08	48.97
4/28/16 4:10	940.33	51.94	154.03	51.92	49.44
4/28/16 4:20	940.30	51.56	154.00	51.56	49.33
4/28/16 4:30	940.26	50.97	153.97	50.94	49.17
4/28/16 4:40	940.25	50.48	153.93	50.41	48.98
4/28/16 4:50	940.18	50.26	153.90	50.19	48.84
4/28/16 5:00	940.19	49.90	153.88	49.82	48.70
4/28/16 5:10	940.15	49.48	153.84	49.40	48.58
4/28/16 5:20	940.10	48.94	153.82	48.84	48.36
4/28/16 5:30	940.06	48.70	153.80	48.59	48.18
4/28/16 5:40	940.01	48.56	153.77	48.47	48.02
4/28/16 5:50	939.99	48.51	153.76	48.43	47.90
4/28/16 6:00	939.94	48.35	153.72	48.26	47.77
4/28/16 6:10	939.91	48.14	153.71	48.06	47.63
4/28/16 6:20	939.86	48.14	153.68	48.06	47.52
4/28/16 6:30	939.82	48.29	153.66	48.23	47.46
4/28/16 6:40	939.78	48.46	153.65	48.41	47.43
4/28/16 6:50	939.73	48.58	153.63	48.55	47.44

Nitrogen Injection

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

Flow Conditions

	Annulus Gauge		Tubing Gauge		Flow Conditions
	Pressure	Temp	Pressure	Temp	Temp
Date / Time	psig	deg F	psig	deg F	deg F
4/28/16 7:00	939.71	48.68	153.61	48.65	47.43
4/28/16 7:10	939.66	48.63	153.59	48.61	47.38
4/28/16 7:20	939.63	48.45	153.56	48.42	47.34
4/28/16 7:30	939.61	48.49	153.55	48.45	47.68
4/28/16 7:40	939.57	48.93	153.54	48.90	48.10
4/28/16 7:50	939.50	49.94	153.54	49.92	49.18
4/28/16 8:00	939.41	51.71	153.55	51.72	51.19
4/28/16 8:10	939.38	53.71	153.53	53.78	53.55
4/28/16 8:20	939.29	55.55	153.53	55.66	55.97
4/28/16 8:30	939.30	57.51	153.53	57.65	58.51
4/28/16 8:40	939.24	59.70	153.54	59.84	61.19
4/28/16 8:50	939.20	62.06	153.54	62.22	64.00
4/28/16 9:00	939.16	64.16	153.55	64.33	66.86
4/28/16 9:10	939.14	65.77	153.54	65.97	69.54
4/28/16 9:20	939.16	66.87	153.53	67.11	72.04
4/28/16 9:30	939.14	67.82	153.51	68.04	74.52
4/28/16 9:40	939.13	68.56	153.49	68.77	76.78
4/28/16 9:50	939.14	68.98	153.47	69.18	78.71
4/28/16 10:00	893.64	69.57	153.45	69.74	80.56
4/28/16 10:10	939.11	70.35	153.45	70.53	82.32
4/28/16 10:20	939.09	71.35	153.44	71.53	83.85
4/28/16 10:30	939.07	72.78	153.43	72.86	85.68
4/28/16 10:40	939.02	74.67	153.42	74.59	87.68
4/28/16 10:50	938.95	76.73	153.42	76.59	89.51
4/28/16 11:00	938.99	78.86	153.41	78.58	91.35
4/28/16 11:10	939.04	79.62	153.95	79.57	93.77
4/28/16 11:20	939.05	79.36	1.83	79.64	95.86
4/28/16 11:30	938.48	78.85	150.94	78.71	97.31
4/28/16 11:40	938.49	82.80	151.87	82.35	99.56
4/28/16 11:50	938.41	86.59	151.82	86.24	109.57
4/28/16 12:00	941.36	90.56	152.23	90.32	106.59
4/28/16 12:10	943.85	93.16	152.85	92.95	107.18
4/28/16 12:20	944.56	95.44	153.40	95.27	110.04
4/28/16 12:30	954.12	96.79	162.21	96.61	94.03
4/28/16 12:40	967.13	98.31	175.34	98.16	86.76
4/28/16 12:50	975.79	99.10	185.05	98.96	89.18
4/28/16 13:00	1006.76	99.69	215.10	99.64	73.81
4/28/16 13:10	1020.70	101.33	232.18	101.24	82.82
4/28/16 13:20	1064.25	101.36	274.28	101.36	77.95
4/28/16 13:30	1104.19	102.02	317.96	102.00	55.64
4/28/16 13:40	1141.05	102.97	349.25	103.11	78.86
4/28/16 13:50	1165.27	102.78	384.06	103.00	81.95
4/28/16 14:00	1186.45	103.44	396.93	103.49	79.81

Nitrogen Injection

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

Flow Conditions

	Annulus Gauge		Tubing Gauge		Flow Conditions
	Pressure	Temp	Pressure	Temp	Temp
Date / Time	psig	deg F	psig	deg F	deg F
4/28/16 14:10	1237.38	104.64	450.66	104.83	76.84
4/28/16 14:20	1247.15	104.07	470.06	104.45	80.93
4/28/16 14:30	1244.38	103.02	467.14	103.20	89.58
4/28/16 14:40	1242.81	101.96	465.44	102.41	96.08
4/28/16 14:50	1241.59	103.00	464.28	103.20	101.13
4/28/16 15:00	1240.68	103.66	463.32	103.86	105.04
4/28/16 15:10	1239.91	103.23	462.51	103.41	107.62
4/28/16 15:20	1239.32	101.79	461.86	101.77	109.25
4/28/16 15:30	1238.79	100.40	461.27	100.38	110.30
4/28/16 15:40	1238.18	100.94	460.72	100.90	111.80
4/28/16 15:50	1237.76	100.74	460.26	100.71	112.43
4/28/16 16:00	1237.34	100.23	455.19	100.30	112.57
4/28/16 16:10	1232.05	99.96	427.33	100.24	112.85
4/28/16 16:20	1217.41	98.07	229.28	98.42	95.83
4/28/16 16:30	1210.66	97.23	352.46	97.59	79.46
4/28/16 16:40	1222.57	97.22	364.60	97.60	79.51
4/28/16 16:50	1231.11	97.70	321.89	98.22	75.55
4/28/16 17:00	1239.35	96.99	441.09	97.66	75.40
4/28/16 17:10	1238.75	96.08	442.20	96.83	83.01
4/28/16 17:20	1238.24	96.93	441.71	97.68	87.32
4/28/16 17:30	1237.80	96.57	441.29	97.51	89.47
4/28/16 17:40	1237.51	95.33	440.93	96.09	89.60
4/28/16 17:50	1237.19	94.71	440.63	95.46	89.26
4/28/16 18:00	1236.18	94.58	252.84	95.25	93.31
4/28/16 18:10	1233.09	92.84	297.89	93.42	82.05
4/28/16 18:20	1233.92	92.75	312.59	93.38	77.04
4/28/16 18:30	1236.09	92.55	319.02	93.23	76.38
4/28/16 18:40	1233.09	92.34	435.67	93.04	76.91
4/28/16 18:50	1232.87	91.58	435.47	92.27	78.65
4/28/16 19:00	1232.71	90.86	435.35	91.52	80.03
4/28/16 19:10	1232.61	89.72	435.22	90.32	80.90
4/28/16 19:20	1230.31	89.06	275.73	89.62	89.01
4/28/16 19:30	1228.11	88.07	288.80	88.60	78.81
4/28/16 19:40	1227.82	86.99	294.77	87.46	83.85
4/28/16 19:50	1240.53	84.99	388.25	85.13	82.62
4/28/16 20:00	1246.40	82.68	448.99	82.68	84.39
4/28/16 20:10	1245.74	80.45	448.23	80.41	82.62
4/28/16 20:20	1245.49	77.22	447.79	77.14	81.22
4/28/16 20:30	1245.03	76.29	447.52	76.09	79.95
4/28/16 20:40	1251.16	76.75	448.24	76.57	80.41
4/28/16 20:50	1264.53	76.92	454.50	76.85	79.81
4/28/16 21:00	1266.91	76.32	430.31	76.28	79.22
4/28/16 21:10	1264.73	75.87	400.95	75.83	81.56

Nitrogen Injection

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

Flow Conditions

	Annulus Gauge		Tubing Gauge		Flow Conditions
	Pressure	Temp	Pressure	Temp	Temp
Date / Time	psig	deg F	psig	deg F	deg F
4/28/16 21:20	1265.00	75.33	428.63	75.28	77.36

Appendix C – Test Pressure Data

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
4/29/16 9:00	1254.249	62.91	457.291	62.99
4/29/16 9:15	1254.119	65.21	457.222	65.36
4/29/16 9:30	1253.979	67.03	1.413	67.18
4/29/16 9:45	1253.922	68.59	2.153	68.78
4/29/16 10:00	1253.914	69.72	456.900	69.93
4/29/16 10:15	1253.807	70.90	456.863	71.14
4/29/16 10:30	1253.871	70.88	456.805	71.39
4/29/16 10:45	1253.638	74.17	456.702	74.16
4/29/16 11:00	1253.607	77.45	456.727	77.21
4/29/16 11:15	1253.606	78.92	456.649	78.54
4/29/16 11:30	1253.599	79.91	456.590	79.66
4/29/16 11:45	1253.505	82.08	456.554	81.78
4/29/16 12:00	1253.573	85.05	456.489	84.70
4/29/16 12:15	1253.595	86.88	456.403	86.58
4/29/16 12:30	1253.576	88.09	456.370	87.76
4/29/16 12:45	1253.571	88.03	456.291	87.67
4/29/16 13:00	1253.565	87.88	456.235	87.52
4/29/16 13:15	1253.469	88.37	456.155	88.13
4/29/16 13:30	1253.527	88.50	456.098	88.23
4/29/16 13:45	1253.379	89.25	456.075	89.10
4/29/16 14:00	1253.423	89.17	456.015	89.02
4/29/16 14:15	1253.301	88.39	455.889	88.29
4/29/16 14:30	1253.264	87.92	455.812	87.84
4/29/16 14:45	1253.233	87.72	455.785	87.66
4/29/16 15:00	1253.196	88.44	455.804	88.41
4/29/16 15:15	1253.108	88.74	455.713	88.69
4/29/16 15:30	1253.103	88.95	455.683	88.81
4/29/16 15:45	1252.984	88.09	455.564	87.97
4/29/16 16:00	1252.995	88.03	455.532	88.01
4/29/16 16:15	1252.802	87.17	455.458	87.28
4/29/16 16:30	1252.775	87.29	455.409	87.51
4/29/16 16:45	1252.750	86.35	455.340	86.72
4/29/16 17:00	1252.766	86.18	455.369	86.55
4/29/16 17:15	1252.693	85.95	455.287	86.47
4/29/16 17:30	1252.631	85.40	455.204	86.04
4/29/16 17:45	1252.616	85.74	455.226	86.46
4/29/16 18:00	1252.476	84.60	455.090	85.22
4/29/16 18:15	1252.531	83.11	455.065	83.68

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
4/29/16 18:30	1252.369	82.72	455.011	83.35
4/29/16 18:45	1252.319	81.72	454.964	82.31
4/29/16 19:00	1252.249	80.44	454.895	80.98
4/29/16 19:15	1252.214	79.40	454.836	79.91
4/29/16 19:30	1252.176	77.67	454.792	78.12
4/29/16 19:45	1252.129	75.77	454.732	76.01
4/29/16 20:00	1252.114	72.65	454.660	72.61
4/29/16 20:15	1252.050	70.48	454.612	70.36
4/29/16 20:30	1251.992	68.69	454.538	68.54
4/29/16 20:45	1251.944	66.82	454.489	66.66
4/29/16 21:00	1251.913	64.90	454.421	64.72
4/29/16 21:15	1251.787	63.35	454.381	63.14
4/29/16 21:30	1251.759	62.00	454.304	61.79
4/29/16 21:45	1251.743	60.25	454.259	60.00
4/29/16 22:00	1251.666	58.89	454.198	58.61
4/29/16 22:15	1251.622	57.57	454.147	57.26
4/29/16 22:30	1251.561	56.61	454.101	56.32
4/29/16 22:45	1251.479	56.03	454.099	55.78
4/29/16 23:00	1251.450	55.53	454.027	55.31
4/29/16 23:15	1251.407	54.73	454.019	54.50
4/29/16 23:30	1251.385	54.12	453.941	53.89
4/29/16 23:45	1251.351	52.96	453.891	52.74
4/30/16 0:00	1251.333	51.45	453.832	51.22
4/30/16 0:15	1251.249	50.76	453.833	50.51
4/30/16 0:30	1251.177	50.56	453.811	50.34
4/30/16 0:45	1251.145	51.42	453.830	51.21
4/30/16 1:00	1251.099	52.75	453.770	52.64
4/30/16 1:15	1251.076	53.20	453.719	53.15
4/30/16 1:30	1251.071	53.68	453.729	53.64
4/30/16 1:45	1250.975	53.63	453.626	53.60
4/30/16 2:00	1250.995	52.75	453.593	52.70
4/30/16 2:15	1250.946	51.83	453.551	51.74
4/30/16 2:30	1250.932	51.16	453.513	51.05
4/30/16 2:45	1250.857	50.77	453.479	50.66
4/30/16 3:00	1250.859	50.57	453.477	50.46
4/30/16 3:15	1250.813	50.47	453.482	50.35
4/30/16 3:30	1250.791	51.02	453.426	50.95
4/30/16 3:45	1250.765	51.28	453.400	51.20

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
4/30/16 4:00	1250.668	51.19	453.324	51.14
4/30/16 4:15	1250.683	51.35	453.330	51.31
4/30/16 4:30	1250.643	51.35	453.283	51.32
4/30/16 4:45	1250.602	50.32	453.206	50.29
4/30/16 5:00	1250.599	49.63	453.148	49.56
4/30/16 5:15	1250.539	48.81	453.069	48.72
4/30/16 5:30	1250.528	48.32	453.057	48.20
4/30/16 5:45	1250.491	47.40	453.026	47.32
4/30/16 6:00	1250.501	46.70	452.984	46.58
4/30/16 6:15	1250.428	45.88	452.956	45.76
4/30/16 6:30	1250.423	45.23	452.942	45.10
4/30/16 6:45	1250.360	44.67	452.922	44.53
4/30/16 7:00	1250.342	44.11	452.892	43.96
4/30/16 7:15	1250.302	43.89	452.887	43.74
4/30/16 7:30	1250.369	44.09	452.904	43.96
4/30/16 7:45	1250.271	44.74	452.853	44.63
4/30/16 8:00	1250.169	46.15	452.795	46.08
4/30/16 8:15	1250.114	48.11	452.820	48.07
4/30/16 8:30	1250.043	50.49	452.779	50.50
4/30/16 8:45	1249.978	53.13	452.759	53.18
4/30/16 9:00	1250.002	55.27	452.751	55.37
4/30/16 9:15	1250.041	56.54	452.764	56.71
4/30/16 9:30	1249.992	57.32	452.732	57.53
4/30/16 9:45	1249.972	58.11	452.686	58.33
4/30/16 10:00	1249.922	59.56	452.673	59.75
4/30/16 10:15	1249.898	61.04	452.640	61.28
4/30/16 10:30	1249.764	63.21	452.594	63.45
4/30/16 10:45	1249.668	66.84	452.603	66.94
4/30/16 11:00	1249.590	71.78	452.667	71.65
4/30/16 11:15	1249.665	75.30	452.653	75.27
4/30/16 11:30	1249.610	77.60	452.626	77.62
4/30/16 11:45	1249.739	79.02	452.560	78.95
4/30/16 12:00	1249.670	83.19	452.546	82.99
4/30/16 12:15	1249.759	84.61	452.504	84.43
4/30/16 12:30	1249.835	86.46	452.509	86.38
4/30/16 12:45	1249.813	87.49	452.499	87.33
4/30/16 13:00	1249.924	88.79	452.446	88.85
4/30/16 13:15	1249.901	88.49	452.438	88.36

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
4/30/16 13:30	1249.811	91.58	452.363	91.53
4/30/16 13:45	1249.858	91.70	452.306	91.79
4/30/16 14:00	1249.871	90.94	452.318	90.94
4/30/16 14:15	1249.887	88.21	452.294	88.20
4/30/16 14:30	1249.714	91.76	452.281	91.78
4/30/16 14:45	1249.777	90.04	452.160	90.18
4/30/16 15:00	1249.742	90.81	452.199	90.90
4/30/16 15:15	1249.721	91.48	452.181	91.51
4/30/16 15:30	1249.649	92.53	452.162	92.49
4/30/16 15:45	1249.581	93.61	452.083	93.63
4/30/16 16:00	1249.678	90.95	452.016	91.06
4/30/16 16:15	1249.583	92.23	452.057	92.29
4/30/16 16:30	1249.554	90.93	451.972	91.33
4/30/16 16:45	1249.484	89.95	451.964	90.33
4/30/16 17:00	1249.492	91.12	451.968	91.58
4/30/16 17:15	1249.469	89.66	451.873	90.38
4/30/16 17:30	1249.428	88.58	451.878	89.23
4/30/16 17:45	1249.399	90.93	451.896	91.66
4/30/16 18:00	1249.386	89.93	451.828	90.63
4/30/16 18:15	1249.397	88.39	451.787	89.04
4/30/16 18:30	1249.301	86.78	451.720	87.37
4/30/16 18:45	1249.251	85.50	451.692	86.08
4/30/16 19:00	1249.251	83.78	451.646	84.33
4/30/16 19:15	1249.125	83.07	451.616	83.61
4/30/16 19:30	1249.113	81.45	451.595	81.93
4/30/16 19:45	1249.104	80.15	451.564	80.43
4/30/16 20:00	1249.109	76.82	451.483	76.78
4/30/16 20:15	1249.038	74.04	451.431	73.90
4/30/16 20:30	1249.074	71.66	451.429	71.47
4/30/16 20:45	1249.011	69.39	451.364	69.09
4/30/16 21:00	1248.942	67.73	451.314	67.45
4/30/16 21:15	1248.834	66.21	451.256	65.87
4/30/16 21:30	1248.777	65.33	451.260	65.02
4/30/16 21:45	1248.720	64.87	451.215	64.56
4/30/16 22:00	1248.657	64.48	451.217	64.19
4/30/16 22:15	1248.657	64.07	451.182	63.85
4/30/16 22:30	1248.663	62.93	451.121	62.69
4/30/16 22:45	1248.591	62.10	451.107	61.89

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
4/30/16 23:00	1248.621	61.24	451.094	61.04
4/30/16 23:15	1248.544	62.45	451.174	62.27
4/30/16 23:30	1248.528	63.39	451.133	63.35
4/30/16 23:45	1248.503	63.60	451.122	63.60
5/1/16 0:00	1248.544	63.82	451.091	63.82
5/1/16 0:15	1248.491	64.02	451.069	64.03
5/1/16 0:30	1248.470	63.74	451.019	63.75
5/1/16 0:45	1248.457	63.31	450.989	63.30
5/1/16 1:00	1248.388	62.87	450.974	62.87
5/1/16 1:15	1248.356	62.58	450.897	62.58
5/1/16 1:30	1248.405	62.07	450.912	62.06
5/1/16 1:45	1248.349	61.52	450.872	61.53
5/1/16 2:00	1248.345	61.13	450.855	61.11
5/1/16 2:15	1248.334	60.68	450.825	60.67
5/1/16 2:30	1248.345	59.87	450.793	59.88
5/1/16 2:45	1248.328	58.59	450.747	58.58
5/1/16 3:00	1248.234	57.67	450.696	57.64
5/1/16 3:15	1248.248	56.88	450.659	56.84
5/1/16 3:30	1248.257	55.86	450.661	55.82
5/1/16 3:45	1248.241	55.01	450.628	54.97
5/1/16 4:00	1248.200	54.29	450.589	54.24
5/1/16 4:15	1248.196	53.45	450.569	53.41
5/1/16 4:30	1248.132	52.57	450.547	52.53
5/1/16 4:45	1248.158	51.77	450.504	51.72
5/1/16 5:00	1248.111	51.07	450.461	51.01
5/1/16 5:15	1248.043	50.57	450.455	50.51
5/1/16 5:30	1248.053	49.84	450.380	49.77
5/1/16 5:45	1248.048	49.07	450.397	49.01
5/1/16 6:00	1248.038	48.73	450.423	48.64
5/1/16 6:15	1247.975	48.67	450.397	48.62
5/1/16 6:30	1247.938	48.59	450.385	48.55
5/1/16 6:45	1247.908	48.35	450.341	48.34
5/1/16 7:00	1247.846	48.02	450.304	48.00
5/1/16 7:15	1247.879	47.49	450.258	47.45
5/1/16 7:30	1247.891	47.54	450.323	47.51
5/1/16 7:45	1247.794	47.49	450.272	47.48
5/1/16 8:00	1247.791	47.32	450.232	47.30
5/1/16 8:15	1247.778	47.24	450.215	47.23

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
5/1/16 8:30	1247.801	47.27	450.214	47.26
5/1/16 8:45	1247.822	47.48	450.223	47.46
5/1/16 9:00	1247.778	48.15	450.208	48.17
5/1/16 9:15	1247.759	48.61	450.200	48.62
5/1/16 9:30	1247.702	49.67	450.181	49.69
5/1/16 9:45	1247.735	49.97	450.151	50.04
5/1/16 10:00	1247.650	49.87	450.048	49.93
5/1/16 10:15	1247.654	49.14	450.038	49.18
5/1/16 10:30	1247.702	48.98	450.065	48.97
5/1/16 10:45	1247.660	49.15	450.087	49.15
5/1/16 11:00	1247.624	49.53	450.025	49.55
5/1/16 11:15	1247.587	49.72	450.022	49.77
5/1/16 11:30	1247.591	49.83	450.011	49.86
5/1/16 11:45	1247.579	49.84	450.004	49.84
5/1/16 12:00	1247.536	50.48	449.952	50.50
5/1/16 12:15	1247.507	51.40	449.979	51.45
5/1/16 12:30	1247.444	52.10	449.958	52.16
5/1/16 12:45	1247.430	53.21	449.960	53.32
5/1/16 13:00	1247.494	53.58	449.902	53.69
5/1/16 13:15	1247.439	54.03	449.883	54.13
5/1/16 13:30	1247.416	54.43	449.883	54.52
5/1/16 13:45	1247.367	54.62	449.801	54.70
5/1/16 14:00	1247.423	55.04	449.839	55.08
5/1/16 14:15	1247.390	55.40	449.839	55.47
5/1/16 14:30	1247.432	55.80	449.810	55.86
5/1/16 14:45	1247.344	56.81	449.799	56.92
5/1/16 15:00	1247.285	57.79	449.742	57.93
5/1/16 15:15	1247.283	57.01	449.721	57.08
5/1/16 15:30	1247.319	57.12	449.744	57.18
5/1/16 15:45	1247.261	57.78	449.710	57.86
5/1/16 16:00	1247.201	58.05	449.647	58.18
5/1/16 16:15	1247.291	58.01	449.699	58.11
5/1/16 16:30	1247.253	58.63	449.672	58.76
5/1/16 16:45	1247.201	58.30	449.600	58.45
5/1/16 17:00	1247.184	57.94	449.566	58.06
5/1/16 17:15	1247.234	57.87	449.594	57.94
5/1/16 17:30	1247.197	58.15	449.589	58.26
5/1/16 17:45	1247.161	58.92	449.576	59.05

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
5/1/16 18:00	1247.128	57.99	449.481	58.07
5/1/16 18:15	1247.105	56.78	449.441	56.81
5/1/16 18:30	1247.121	56.16	449.421	56.18
5/1/16 18:45	1247.083	55.42	449.355	55.43
5/1/16 19:00	1247.025	54.70	449.364	54.70
5/1/16 19:15	1247.026	54.12	449.334	54.10
5/1/16 19:30	1247.023	53.58	449.303	53.56
5/1/16 19:45	1246.987	53.00	449.274	52.98
5/1/16 20:00	1246.958	52.20	449.241	52.16
5/1/16 20:15	1246.938	51.56	449.226	51.52
5/1/16 20:30	1246.900	50.96	449.224	50.92
5/1/16 20:45	1246.869	50.38	449.211	50.33
5/1/16 21:00	1246.889	50.00	449.207	49.95
5/1/16 21:15	1246.820	49.73	449.199	49.72
5/1/16 21:30	1246.830	49.04	449.167	49.04
5/1/16 21:45	1246.821	48.12	449.134	48.08
5/1/16 22:00	1246.823	47.69	449.128	47.63
5/1/16 22:15	1246.775	47.38	449.084	47.31
5/1/16 22:30	1246.752	47.27	449.094	47.22
5/1/16 22:45	1246.687	47.20	449.085	47.18
5/1/16 23:00	1246.674	47.09	449.043	47.05
5/1/16 23:15	1246.635	46.98	449.039	46.95
5/1/16 23:30	1246.629	46.89	449.019	46.87
5/1/16 23:45	1246.600	46.77	448.984	46.75
5/2/16 0:00	1246.610	46.67	448.984	46.64
5/2/16 0:15	1246.556	46.50	448.978	46.49
5/2/16 0:30	1246.546	46.27	448.947	46.25
5/2/16 0:45	1246.535	46.10	448.927	46.07
5/2/16 1:00	1246.550	46.07	448.929	46.04
5/2/16 1:15	1246.519	46.02	448.920	46.01
5/2/16 1:30	1246.503	45.95	448.908	45.93
5/2/16 1:45	1246.504	45.86	448.866	45.83
5/2/16 2:00	1246.512	45.71	448.862	45.69
5/2/16 2:15	1246.444	45.56	448.829	45.53
5/2/16 2:30	1246.435	45.33	448.844	45.32
5/2/16 2:45	1246.415	45.07	448.790	45.03
5/2/16 3:00	1246.415	44.42	448.813	44.38
5/2/16 3:15	1246.436	43.29	448.833	43.23

TEST PRESSURE

Well Name:	State LPG Storage No. 2
Operator:	Western Refining Company, LP
State:	New Mexico
County:	Lea
Field:	Jal Station
API Number:	30-025-35955

PRESSURE INFORMATION

	Annulus Pressure		Tubing Pressure	
	Pressure	Temp	Pressure	Temp
Date / Time	psig	deg F	psig	deg F
5/2/16 3:30	1246.414	42.18	448.755	42.10
5/2/16 3:45	1246.506	41.16	448.734	41.06
5/2/16 4:00	1246.396	40.40	448.673	40.30
5/2/16 4:15	1246.406	39.83	448.662	39.73
5/2/16 4:30	1246.363	39.44	448.624	39.34
5/2/16 4:45	1246.381	39.02	448.628	38.92
5/2/16 5:00	1246.370	38.45	448.614	38.35
5/2/16 5:15	1246.344	37.92	448.608	37.81
5/2/16 5:30	1246.326	37.53	448.581	37.42
5/2/16 5:45	1246.308	37.11	448.540	37.02
5/2/16 6:00	1246.292	36.88	448.526	36.77
5/2/16 6:15	1246.314	37.19	448.536	37.10
5/2/16 6:30	1246.305	37.36	448.562	37.28
5/2/16 6:45	1246.302	38.12	448.527	38.06
5/2/16 7:00	1246.194	38.15	1.328	38.13
5/2/16 7:15	1246.101	37.57	16.116	37.51
5/2/16 7:30	1245.638	37.52	447.807	37.46
5/2/16 7:45	1245.629	38.43	447.859	38.35
5/2/16 8:00	1245.544	40.65	447.475	40.62
5/2/16 8:15	1245.521	43.12	447.289	43.14
5/2/16 8:30	1245.480	45.35	447.773	45.43
5/2/16 8:45	1245.515	47.45	447.854	47.50
5/2/16 9:00	1245.550	48.94	447.852	49.01

Appendix D – Sonar Borehole Volumes

2m-0803.inv
SONARWIRE GLOBAL, LLC
Depth versus Volume

WESTERN REFINING
STORAGE WELL NO. 2

JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1673	465.2	465.2	82.9	82.9
1674	441.5	906.7	78.6	161.5
1675	418.8	1325.5	74.6	236.1
1676	388.9	1714.4	69.3	305.3
1677	360.4	2074.8	64.2	369.5
1678	247.4	2322.2	44.1	413.6
1679	155.7	2477.9	27.7	441.3
1680	53.9	2531.8	9.6	450.9
1681	4.9	2536.8	0.9	451.8
1682	4.5	2541.2	0.8	452.6
1683	4.0	2545.2	0.7	453.3
1684	4.3	2549.5	0.8	454.1
1685	4.6	2554.1	0.8	454.9
1686	116.1	2670.2	20.7	475.6
1687	376.8	3047.0	67.1	542.7
1688	363.6	3410.7	64.8	607.5
1689	351.3	3762.0	62.6	670.0
1690	345.1	4107.1	61.5	731.5
1691	339.5	4446.5	60.5	792.0
1692	354.1	4800.6	63.1	855.0
1693	369.9	5170.5	65.9	920.9
1694	380.2	5550.7	67.7	988.6
1695	391.3	5942.0	69.7	1058.3
1696	387.3	6329.3	69.0	1127.3
1697	383.9	6713.2	68.4	1195.7
1698	411.2	7124.4	73.2	1268.9
1699	440.3	7564.8	78.4	1347.3
1700	421.5	7986.3	75.1	1422.4
1701	403.4	8389.6	71.8	1494.3
1702	391.9	8781.5	69.8	1564.0
1703	381.1	9162.6	67.9	1631.9
1704	373.9	9536.5	66.6	1698.5
1705	367.5	9904.0	65.5	1764.0
1706	395.9	10299.9	70.5	1834.5
1707	426.5	10726.4	76.0	1910.5
1708	442.4	11168.7	78.8	1989.2
1709	458.8	11627.6	81.7	2071.0
1710	460.2	12087.7	82.0	2152.9
1711	462.4	12550.1	82.4	2235.3
1712	451.3	13001.4	80.4	2315.6
1713	441.0	13442.4	78.6	2394.2
1714	437.7	13880.1	78.0	2472.2
1715	436.9	14317.0	77.8	2550.0
1716	130.0	14447.0	23.2	2573.1
1717	3.7	14450.7	0.7	2573.8
1718	4.3	14455.1	0.8	2574.6
1719	5.1	14460.1	0.9	2575.5
1720	5.5	14465.6	1.0	2576.4
1721	6.0	14471.6	1.1	2577.5
1722	4.9	14476.5	0.9	2578.4
1723	4.0	14480.5	0.7	2579.1
1724	72.1	14552.6	12.8	2591.9

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WESTERN REFINING
STORAGE WELL NO. 2

JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1725	224.7	14777.3	40.0	2632.0
1726	461.7	15239.0	82.2	2714.2
1727	783.1	16022.2	139.5	2853.7
1728	784.8	16807.0	139.8	2993.5
1729	786.6	17593.6	140.1	3133.6
1730	753.0	18346.7	134.1	3267.7
1731	720.6	19067.3	128.3	3396.0
1732	577.3	19644.6	102.8	3498.8
1733	450.6	20095.2	80.3	3579.1
1734	315.1	20410.3	56.1	3635.2
1735	205.3	20615.6	36.6	3671.8
1736	145.3	20760.9	25.9	3697.7
1737	97.0	20857.9	17.3	3715.0
1738	37.4	20895.3	6.7	3721.6
1739	6.1	20901.3	1.1	3722.7
1740	6.1	20907.4	1.1	3723.8
1741	6.1	20913.5	1.1	3724.9
1742	6.1	20919.6	1.1	3725.9
1743	6.1	20925.7	1.1	3727.0
1744	6.1	20931.9	1.1	3728.1
1745	6.2	20938.0	1.1	3729.2
1746	6.2	20944.2	1.1	3730.3
1747	6.2	20950.4	1.1	3731.4
1748	6.2	20956.7	1.1	3732.5
1749	6.3	20962.9	1.1	3733.7
1750	6.3	20969.2	1.1	3734.8
1751	6.3	20975.5	1.1	3735.9
1752	6.3	20981.9	1.1	3737.0
1753	6.4	20988.3	1.1	3738.2
1754	6.4	20994.7	1.1	3739.3
1755	341.4	21336.0	60.8	3800.1
1756	242.8	21578.8	43.2	3843.4
1757	161.6	21740.4	28.8	3872.1
1758	58.0	21798.4	10.3	3882.5
1759	6.4	21804.8	1.1	3883.6
1760	6.2	21811.0	1.1	3884.7
1761	6.0	21817.1	1.1	3885.8
1762	5.9	21823.0	1.0	3886.8
1763	626.1	22449.0	111.5	3998.3
1764	897.8	23346.8	159.9	4158.3
1765	1219.7	24566.5	217.2	4375.5
1766	1225.1	25791.7	218.2	4593.7
1767	1230.8	27022.5	219.2	4812.9
1768	1247.0	28269.5	222.1	5035.0
1769	1263.5	29533.1	225.0	5260.1
1770	1262.4	30795.5	224.9	5484.9
1771	1261.5	32057.0	224.7	5709.6
1772	1263.3	33320.2	225.0	5934.6
1773	1265.3	34585.6	225.4	6160.0
1774	1215.2	35800.8	216.4	6376.4
1775	1167.7	36968.5	208.0	6584.4
1776	1097.1	38065.6	195.4	6779.8
1777	1029.6	39095.2	183.4	6963.2
1778	886.9	39982.2	158.0	7121.1

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WESTERN REFINING
STORAGE WELL NO. 2

JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1779	757.4	40739.5	134.9	7256.0
1780	709.7	41449.2	126.4	7382.4
1781	674.3	42123.5	120.1	7502.5
1782	923.8	43047.3	164.5	7667.1
1783	1226.1	44273.4	218.4	7885.4
1784	1256.6	45530.1	223.8	8109.3
1785	1288.3	46818.4	229.5	8338.7
1786	1296.8	48115.1	231.0	8569.7
1787	1305.5	49420.6	232.5	8802.2
1788	1368.6	50789.3	243.8	9046.0
1789	1433.8	52223.1	255.4	9301.3
1790	1516.8	53739.9	270.2	9571.5
1791	1602.9	55342.8	285.5	9857.0
1792	1647.0	56989.8	293.3	10150.3
1793	1692.1	58681.8	301.4	10451.7
1794	1691.9	60373.8	301.3	10753.0
1795	1692.4	62066.2	301.4	11054.5
1796	1674.7	63740.9	298.3	11352.7
1797	1658.0	65398.9	295.3	11648.0
1798	1664.4	67063.2	296.4	11944.5
1799	1671.2	68734.5	297.7	12242.1
1800	1671.6	70406.1	297.7	12539.9
1801	1672.5	72078.6	297.9	12837.8
1802	1662.7	73741.3	296.1	13133.9
1803	1653.6	75394.9	294.5	13428.4
1804	1573.3	76968.2	280.2	13708.6
1805	1499.3	78467.4	267.0	13975.7
1806	1342.5	79810.0	239.1	14214.8
1807	1198.4	81008.4	213.5	14428.2
1808	1347.6	82356.0	240.0	14668.2
1809	1506.4	83862.5	268.3	14936.5
1810	1468.6	85331.0	261.6	15198.1
1811	1432.3	86763.3	255.1	15453.2
1812	1369.0	88132.4	243.8	15697.1
1813	1308.7	89441.0	233.1	15930.1
1814	1207.3	90648.4	215.0	16145.2
1815	1112.0	91760.4	198.1	16343.2
1816	964.7	92725.1	171.8	16515.1
1817	828.4	93553.5	147.5	16662.6
1818	950.2	94503.7	169.2	16831.8
1819	1087.7	95591.3	193.7	17025.5
1820	1354.1	96945.5	241.2	17266.7
1821	1659.6	98605.0	295.6	17562.3
1822	2021.9	100626.9	360.1	17922.4
1823	2422.1	103049.0	431.4	18353.8
1824	2419.4	105468.4	430.9	18784.7
1825	2417.1	107885.5	430.5	19215.2
1826	2362.2	110247.7	420.7	19636.0
1827	2308.5	112556.2	411.2	20047.1
1828	2357.5	114913.7	419.9	20467.0
1829	2411.7	117325.4	429.5	20896.6
1830	2373.3	119698.8	422.7	21319.3
1831	2345.4	122044.2	417.7	21737.0

1832	2511.3	124555.5	447.3	22184.3

WESTERN REFINING
STORAGE WELL NO. 2

JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1833	2693.3	127248.8	479.7	22664.0
1834	2436.9	129685.7	434.0	23098.0
1835	2201.9	131887.7	392.2	23490.2
1836	1516.8	133404.5	270.2	23760.4
1837	964.7	134369.2	171.8	23932.2
1838	800.1	135169.3	142.5	24074.7
1839	653.5	135822.8	116.4	24191.1
1840	199.7	136022.5	35.6	24226.7
1841	7.6	136030.1	1.4	24228.0
1842	8.5	136038.7	1.5	24229.5
1843	2054.4	138093.1	365.9	24595.4
1844	3844.7	141937.8	684.8	25280.2
1845	4068.9	146006.6	724.7	26004.9
1846	4244.2	150250.9	755.9	26760.8
1847	4387.1	154638.0	781.4	27542.2
1848	4518.4	159156.4	804.8	28347.0
1849	4594.5	163750.9	818.3	29165.3
1850	4671.9	168422.7	832.1	29997.4
1851	4705.3	173128.0	838.0	30835.4
1852	4759.0	177886.9	847.6	31683.0
1853	4794.8	182681.8	854.0	32537.0
1854	4811.8	187493.6	857.0	33394.1
1855	4851.7	192345.3	864.1	34258.2
1856	4915.7	197261.0	875.5	35133.7
1857	5024.1	202285.0	894.8	36028.5
1858	5102.1	207387.1	908.7	36937.2
1859	5170.3	212557.4	920.9	37858.1
1860	5196.6	217754.0	925.6	38783.7
1861	5222.1	222976.1	930.1	39713.8
1862	5238.1	228214.2	932.9	40646.7
1863	5269.2	233483.4	938.5	41585.2
1864	5322.0	238805.5	947.9	42533.1
1865	5351.8	244157.2	953.2	43486.3
1866	5335.4	249492.6	950.3	44436.6
1867	5255.3	254747.9	936.0	45372.6
1868	5189.6	259937.5	924.3	46296.9
1869	5116.6	265054.1	911.3	47208.2
1870	5037.2	270091.3	897.2	48105.3
1871	4960.8	275052.1	883.6	48988.9
1872	4894.1	279946.2	871.7	49860.6
1873	4869.2	284815.4	867.2	50727.8
1874	4842.1	289657.5	862.4	51590.2
1875	4864.4	294521.9	866.4	52456.6
1876	4805.7	299327.6	855.9	53312.6
1877	4800.8	304128.3	855.1	54167.6
1878	4860.5	308988.8	865.7	55033.3
1879	4846.8	313835.7	863.3	55896.6
1880	4773.9	318609.6	850.3	56746.8
1881	4720.3	323329.9	840.7	57587.5
1882	4722.6	328052.5	841.1	58428.7
1883	5554.5	333607.1	989.3	59418.0
1884	8106.2	341713.3	1443.8	60861.8

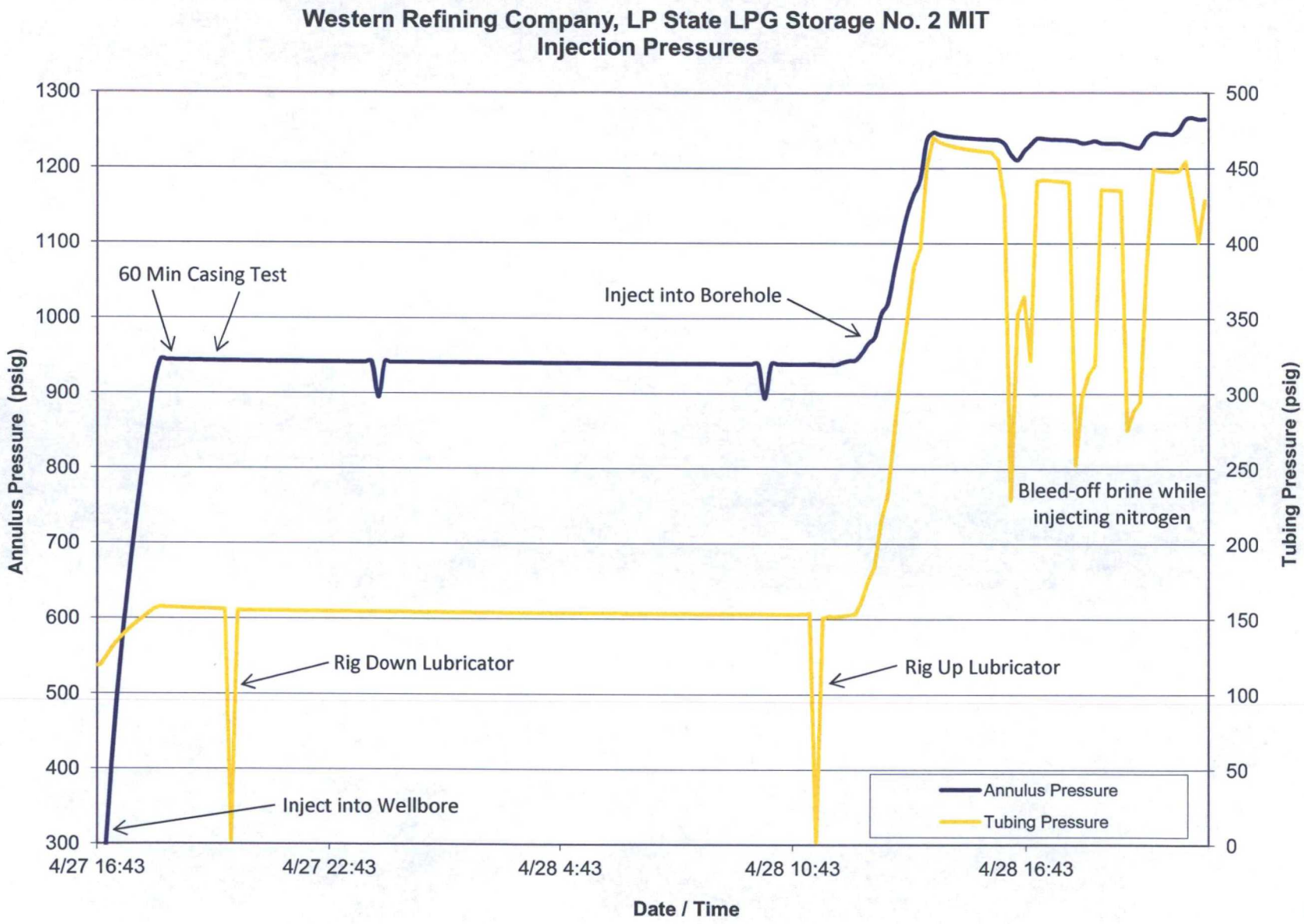
1885	9575.9	351289.2	1705.5	62567.3
1886	9863.3	361152.5	1756.7	64324.0

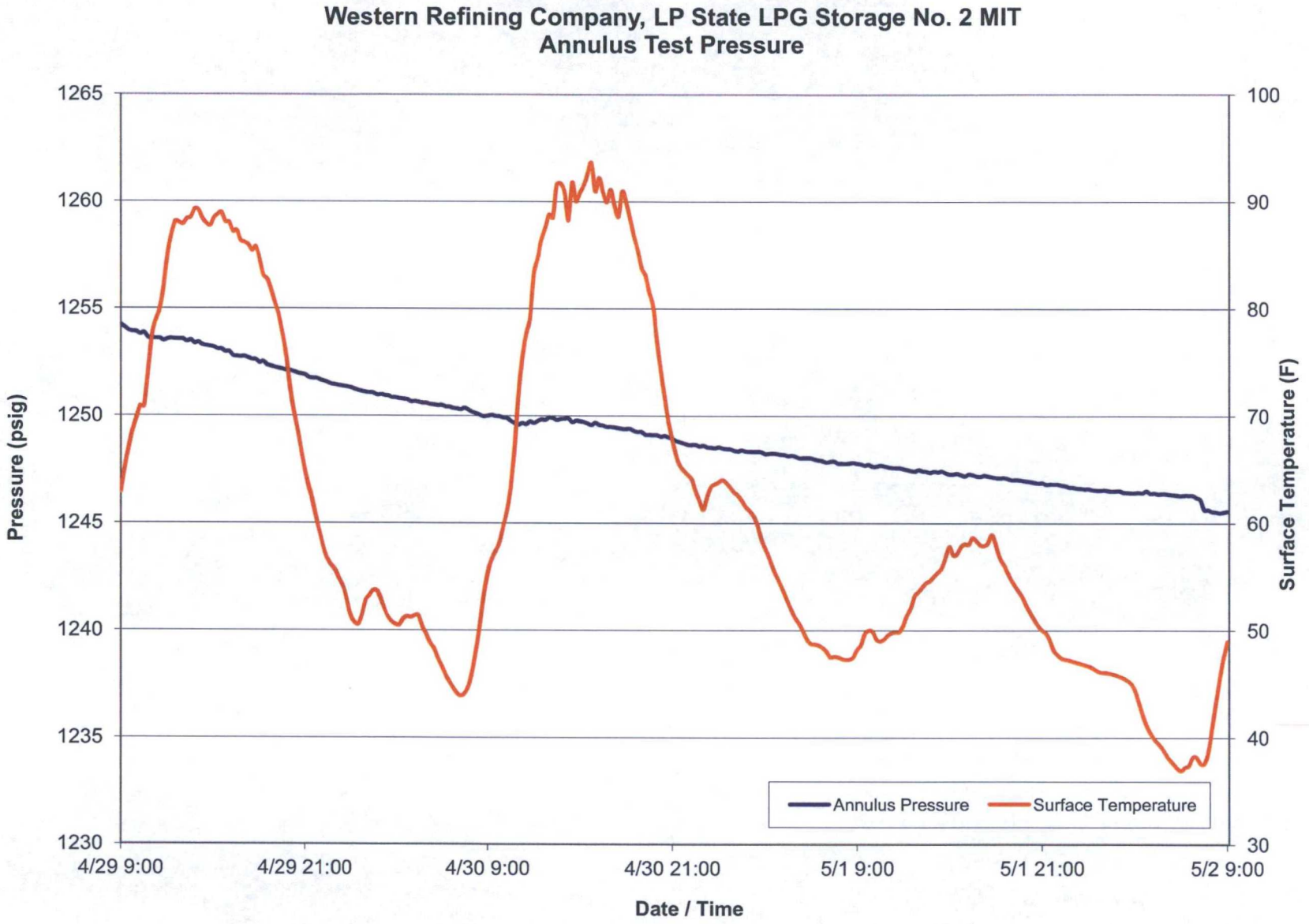
WESTERN REFINING
STORAGE WELL NO. 2

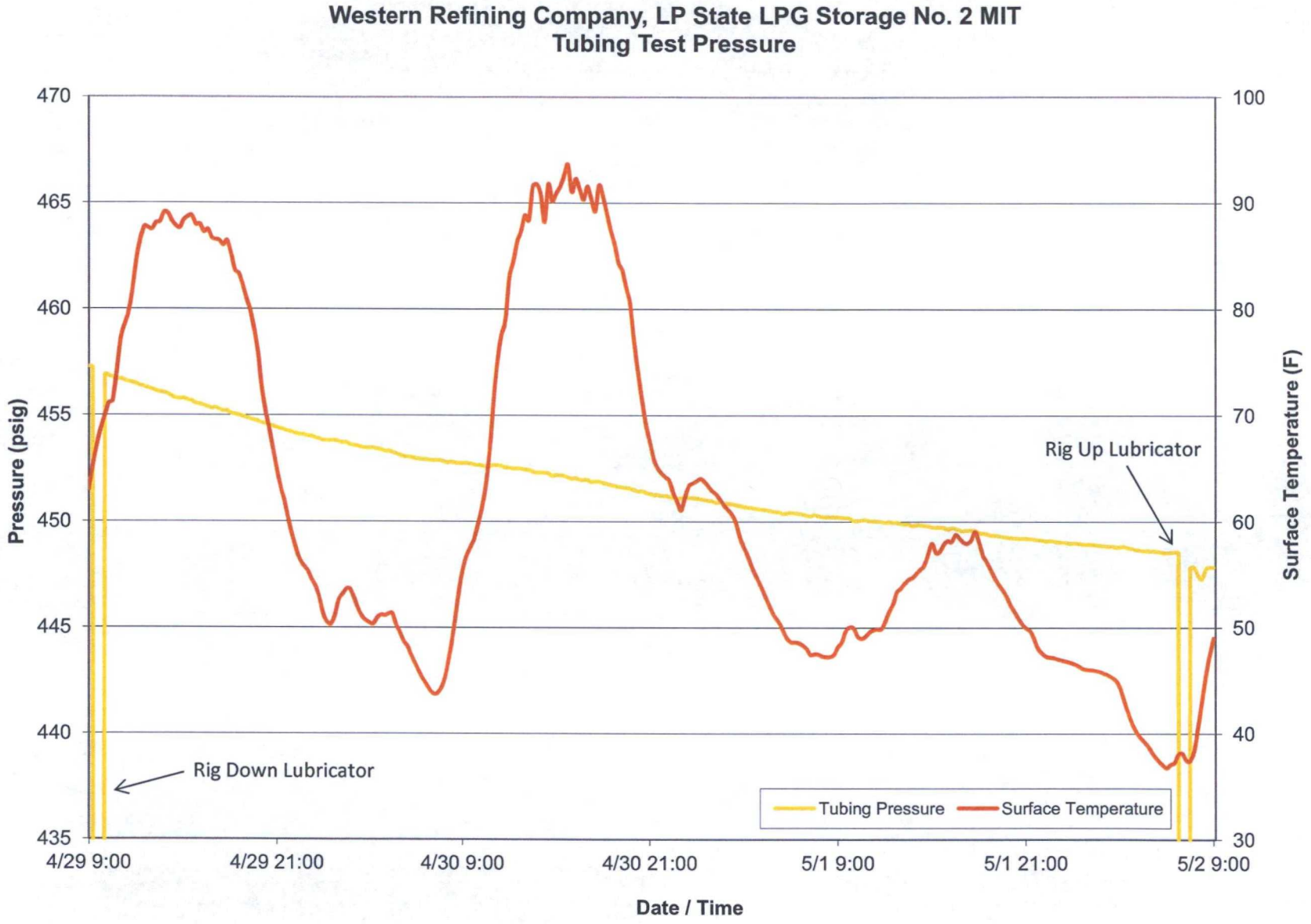
JAL, NM
Fri, Mar 07, 2008

Depth	Cubic ft. per ft.	Cubic ft. total	Barrels per ft.	Barrels total
1887	10167.3	371319.8	1810.9	66134.9
1888	10461.0	381780.7	1863.2	67998.1
1889	10704.0	392484.8	1906.5	69904.6
1890	10787.7	403272.4	1921.4	71825.9
1891	10839.8	414112.2	1930.6	73756.6
1892	10977.6	425089.8	1955.2	75711.8
1893	11003.8	436093.6	1959.9	77671.6
1894	11041.8	447135.4	1966.6	79638.3
1895	11134.6	458270.0	1983.1	81621.4
1896	11157.6	469427.6	1987.2	83608.7
1897	11192.8	480620.3	1993.5	85602.2
1898	11313.8	491934.1	2015.1	87617.3
1899	11266.2	503200.3	2006.6	89623.9
1900	11260.0	514460.3	2005.5	91629.3
1901	11294.5	525754.7	2011.6	93641.0
1902	11387.7	537142.4	2028.2	95669.2
1903	11304.0	548446.5	2013.3	97682.5
1904	11408.7	559855.2	2032.0	99714.5
1905	11559.0	571414.2	2058.8	101773.3
1906	11548.4	582962.6	2056.9	103830.1
1907	11649.3	594611.9	2074.8	105905.0
1908	11839.9	606451.8	2108.8	108013.7
1909	11971.2	618423.0	2132.2	110145.9
1910	11839.2	630262.3	2108.7	112254.6
1911	11788.2	642050.5	2099.6	114354.2
1912	11566.9	653617.4	2060.1	116414.3
1913	11361.9	664979.3	2023.6	118437.9
1914	11247.4	676226.6	2003.2	120441.2
1915	11018.1	687244.8	1962.4	122403.6
1916	10314.6	697559.4	1837.1	124240.7
1917	9979.5	707538.9	1777.4	126018.1
1918	9647.7	717186.6	1718.3	127736.5
1919	9031.8	726218.4	1608.6	129345.1
1920	8283.0	734501.3	1475.3	130820.4
1921	7835.9	742337.2	1395.6	132216.0
1922	7824.8	750162.0	1393.7	133609.6
1923	6795.4	756957.5	1210.3	134820.0
1924	6669.1	763626.6	1187.8	136007.8
1925	6928.9	770555.5	1234.1	137241.9
1926	5551.9	776107.4	988.8	138230.7
1927	10420.0	786527.4	1855.9	140086.6
1928	4688.5	791215.9	835.1	140921.7
1929	5165.4	796381.3	920.0	141841.7
1930	4106.3	800487.7	731.4	142573.0
1931	4007.4	804495.1	713.7	143286.8
1932	2679.0	807174.0	477.1	143763.9
1933	1638.2	808812.3	291.8	144055.7
1934	1165.5	809977.8	207.6	144263.3
1935	752.0	810729.8	133.9	144397.2
1936	256.7	810986.5	45.7	144442.9

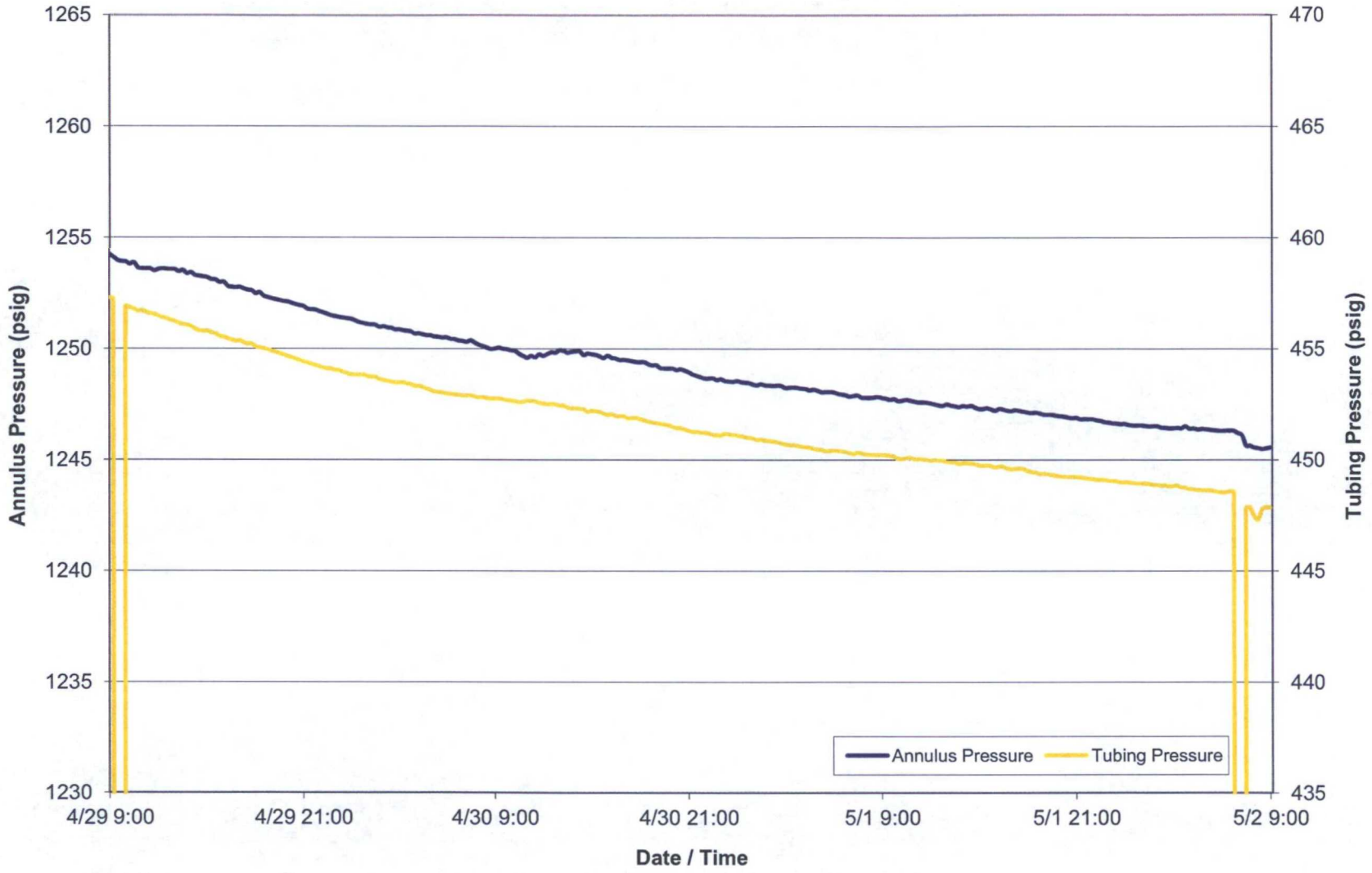
Appendix E – Pressure and Temperature Graphs


Western Refining Company, LP State LPG Storage No. 2 MIT
Injection Pressures
Annulus Pressure (psig)
Tubing Pressure (psig)
Date / Time
1300
1200
1100
1000
900
800
700
600
500
400
300
500
450
400
350
300
250
200
150
100
50
0
4/27 16:43
4/27 22:43
4/28 4:43
4/28 10:43
4/28 16:43
60 Min Casing Test
Inject into Borehole
Bleed-off brine while injecting nitrogen
Rig Down Lubricator
Rig Up Lubricator
Inject into Wellbore
Annulus Pressure
Tubing Pressure

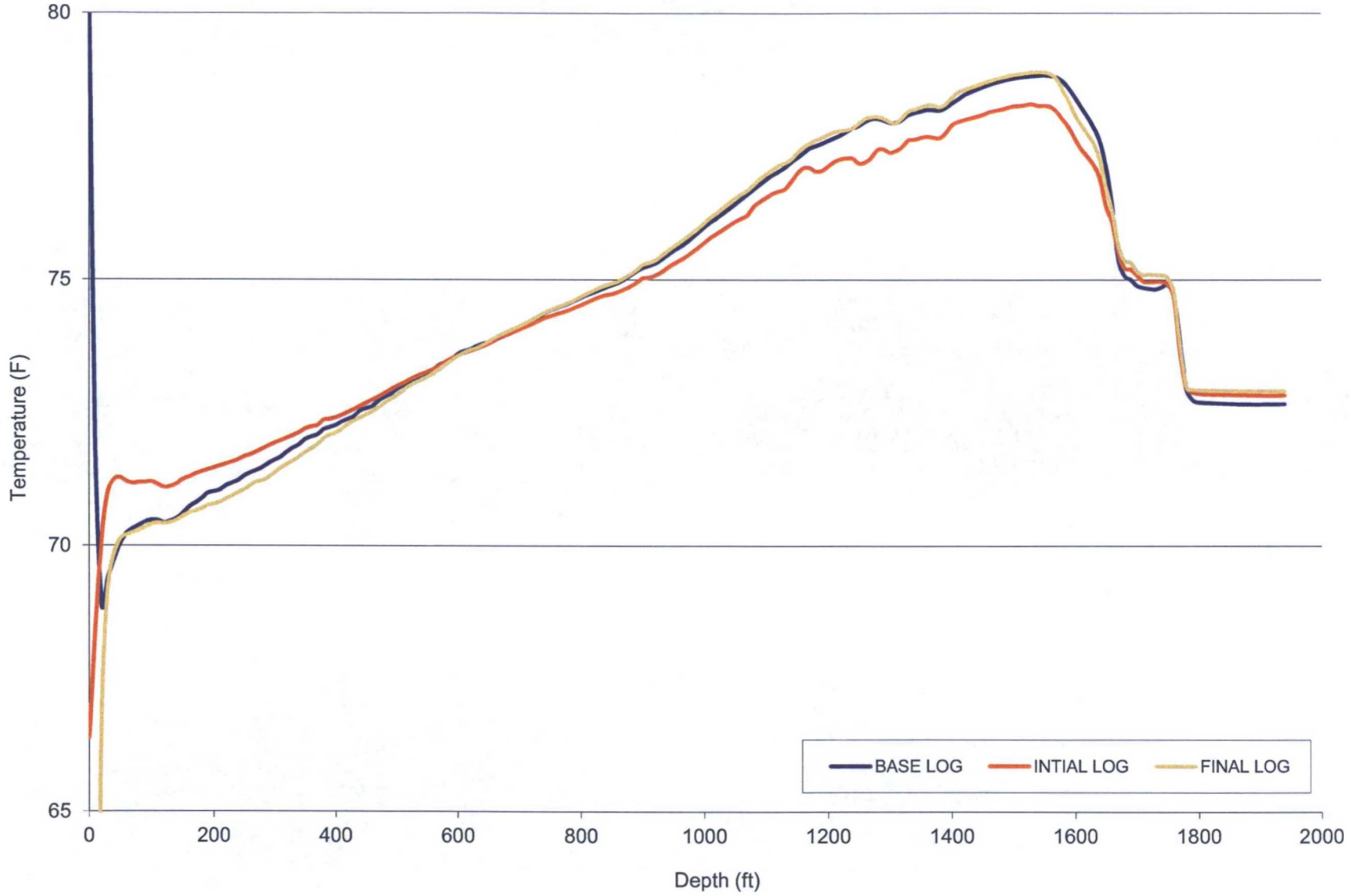

Western Refining Company, LP State LPG Storage No. 2 MIT
Annulus Test Pressure
Pressure (psig)
Surface Temperature (F)
Date / Time
1265
1260
1255
1250
1245
1240
1235
1230
100
90
80
70
60
50
40
30
4/29 9:00
4/29 21:00
4/30 9:00
4/30 21:00
5/1 9:00
5/1 21:00
5/2 9:00
Annulus Pressure
Surface Temperature


Western Refining Company, LP State LPG Storage No. 2 MIT
Tubing Test Pressure
Pressure (psig)
Surface Temperature (F)
Date / Time
470
465
460
455
450
445
440
435
100
90
80
70
60
50
40
30
4/29 9:00
4/29 21:00
4/30 9:00
4/30 21:00
5/1 9:00
5/1 21:00
5/2 9:00
Rig Up Lubricator
Rig Down Lubricator
Tubing Pressure
Surface Temperature

Western Refining Company, LP State LPG Storage No. 2 MIT
Annulus vs. Tubing Pressure



Western Refining Company, LP State LPG Storage No. 2 MIT
Wellbore Temperature Graph



Appendix F – Well Logs

Casedhole Solutions

MIT DENSITY SURVEY

Company WESTERN REFINING COMPANY
Well STATE LPG WELL #2
Field JAL
County LEA
State NEW MEXICO Country

Location: API # : 30-025-35955

SEC M-32TWP 23S RGE 37E

Other Services

Elevation
K.B.
D.F.
G.L. 3303

Permanent Datum Elevation 3303
Log Measured From BOTTOM FLANGE
Drilling Measured From

Company WESTERN REFINING COMPANY
Well STATE LPG WELL #2
Field JAL
County LEA
State NEW MEXICO Country

Date	4-27-16		
Run Number	ONE		
Depth Driller			
Depth Logger	1935		
Bottom Logged Interval	1935		
Top Log Interval	SURFACE		
Open Hole Size			
Type Fluid	WATER		
Density / Viscosity			
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger on Bottom			
Equipment Number	0839		
Location	HUTCHINSON KS.		
Recorded By	WILL GEORGE		
Witnessed By	THOMASON		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9-5/8"	36 lb/ft	Surface	250'
Prot. String				
Production String	7"	23 lb/ft	Surface	1672'
Liner	5-1/2"	15.5		1656'
Tubing	2.875"	6.5 LB/FT	Surface	1954'

<< Fold Here >>>

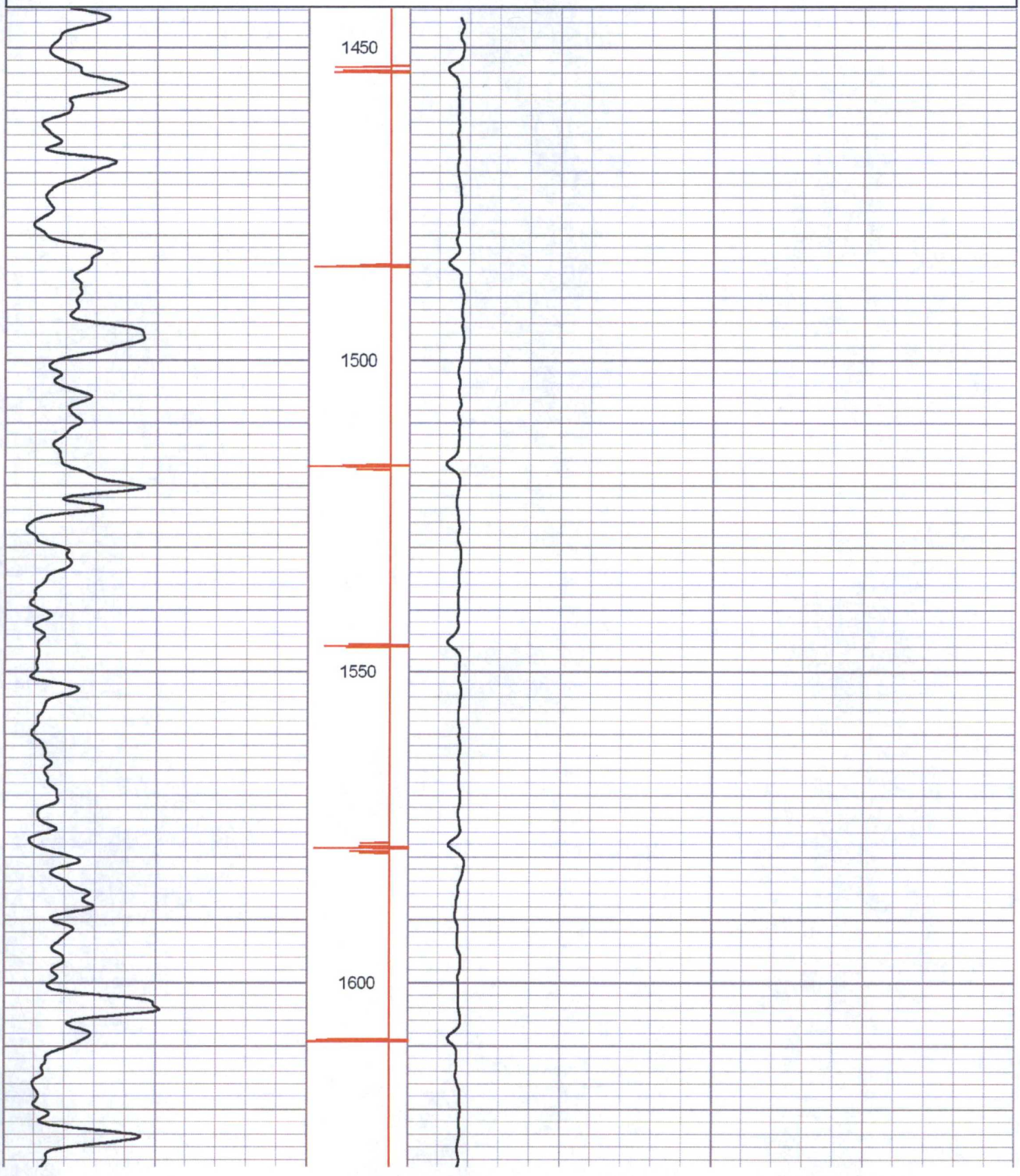
Comments

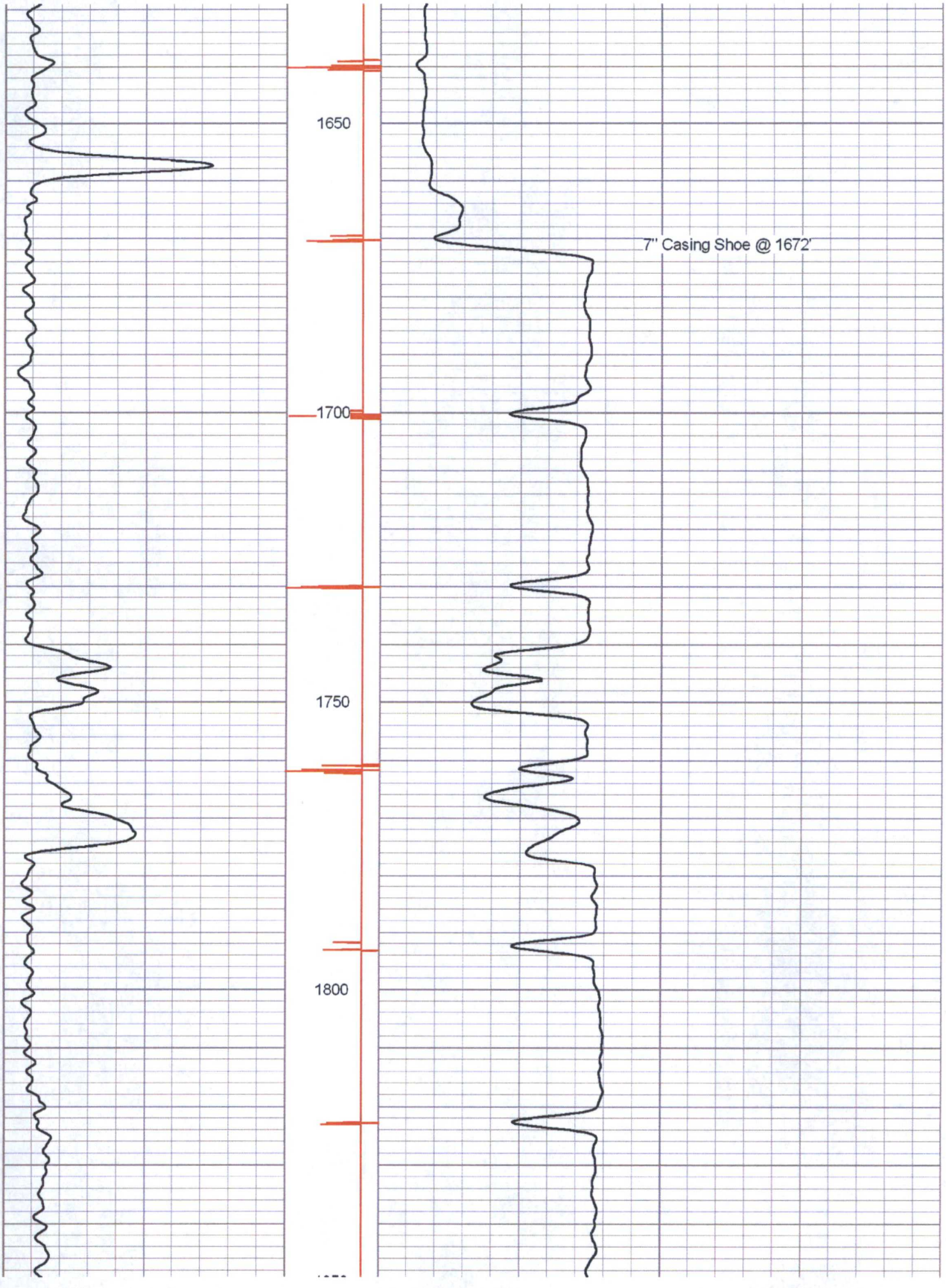
THANK YOU FOR USING CASEDHOLE SOULTIONS

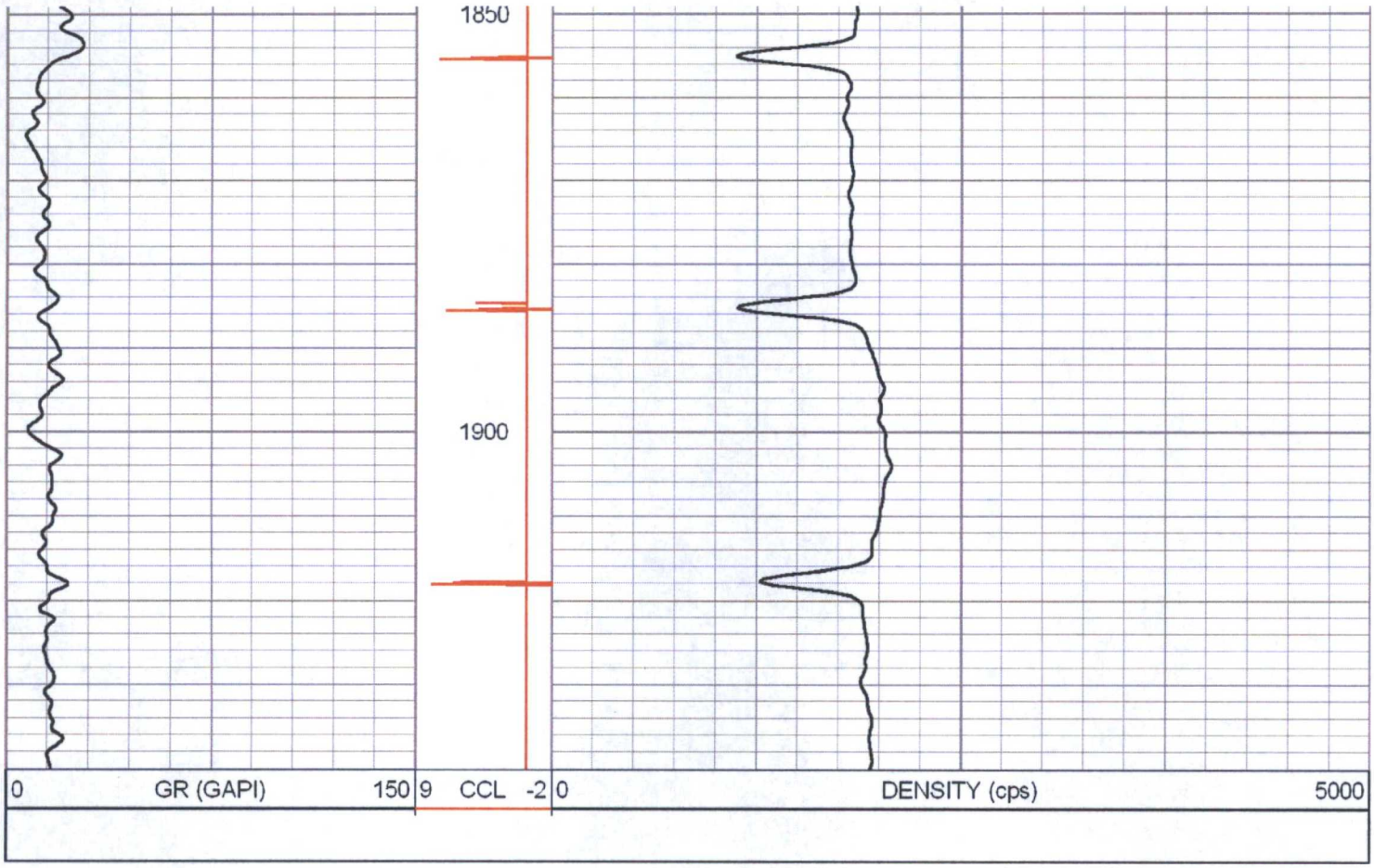
BASE PASS

Casedhole Solutions

Database File:	western refining #2.db
Dataset Pathname:	pass5
Presentation Format:	gr-n-ccl
Dataset Creation:	Wed Apr 27 15:23:01 2016 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240



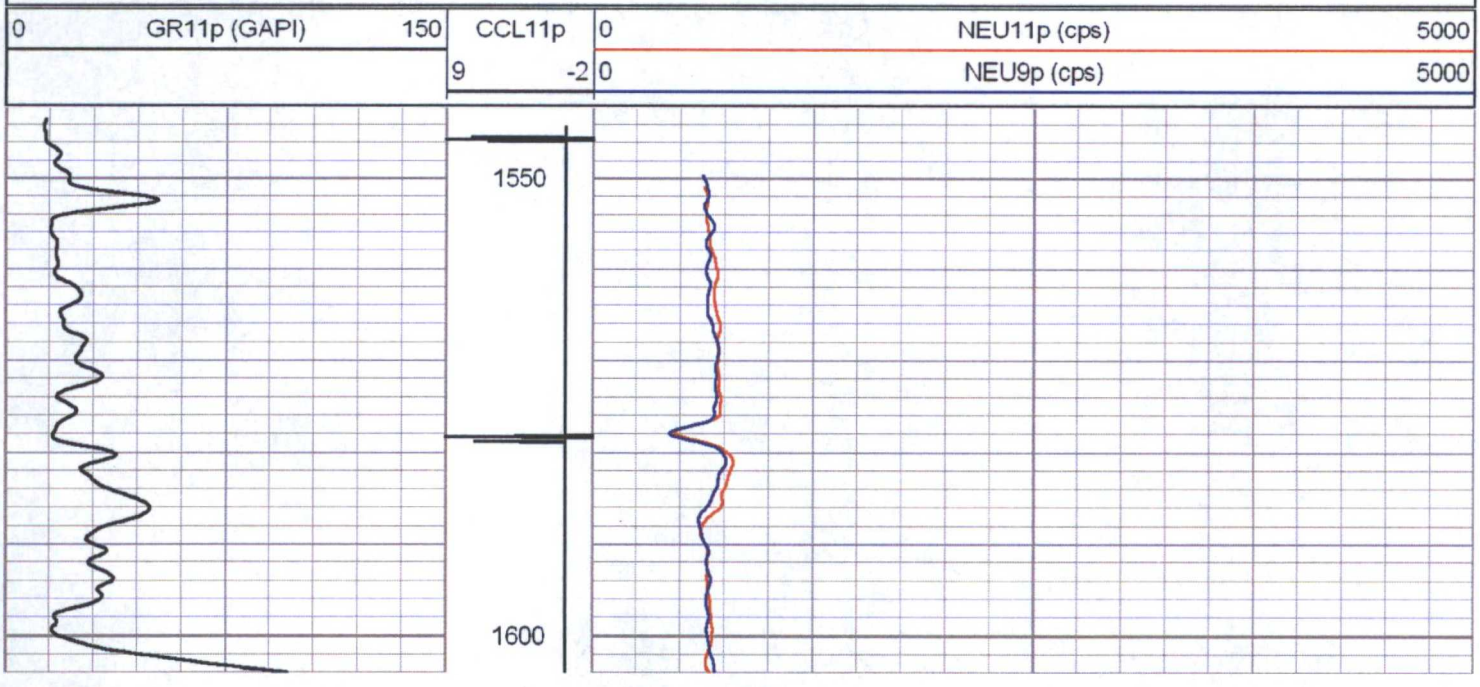

1650
7" Casing Shoe @ 1672'
1700
1750
1800

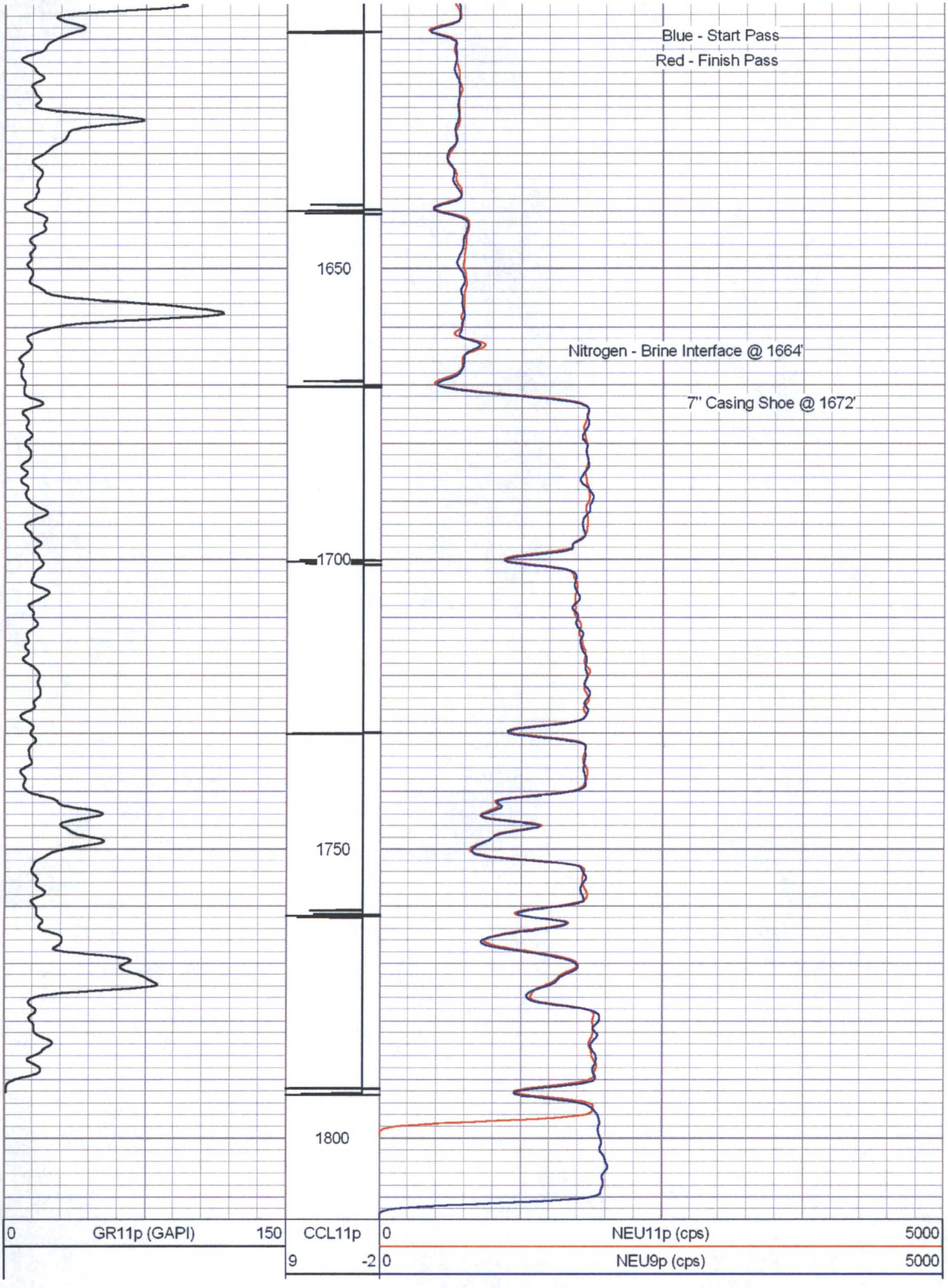


Casedhole Solutions

CASING TEST

Database File:	western refining #2.db
Dataset Pathname:	pass9m
Presentation Format:	gr-n-ccl
Dataset Creation:	Wed May 25 08:04:53 2016
Charted by:	Depth in Feet scaled 1:240

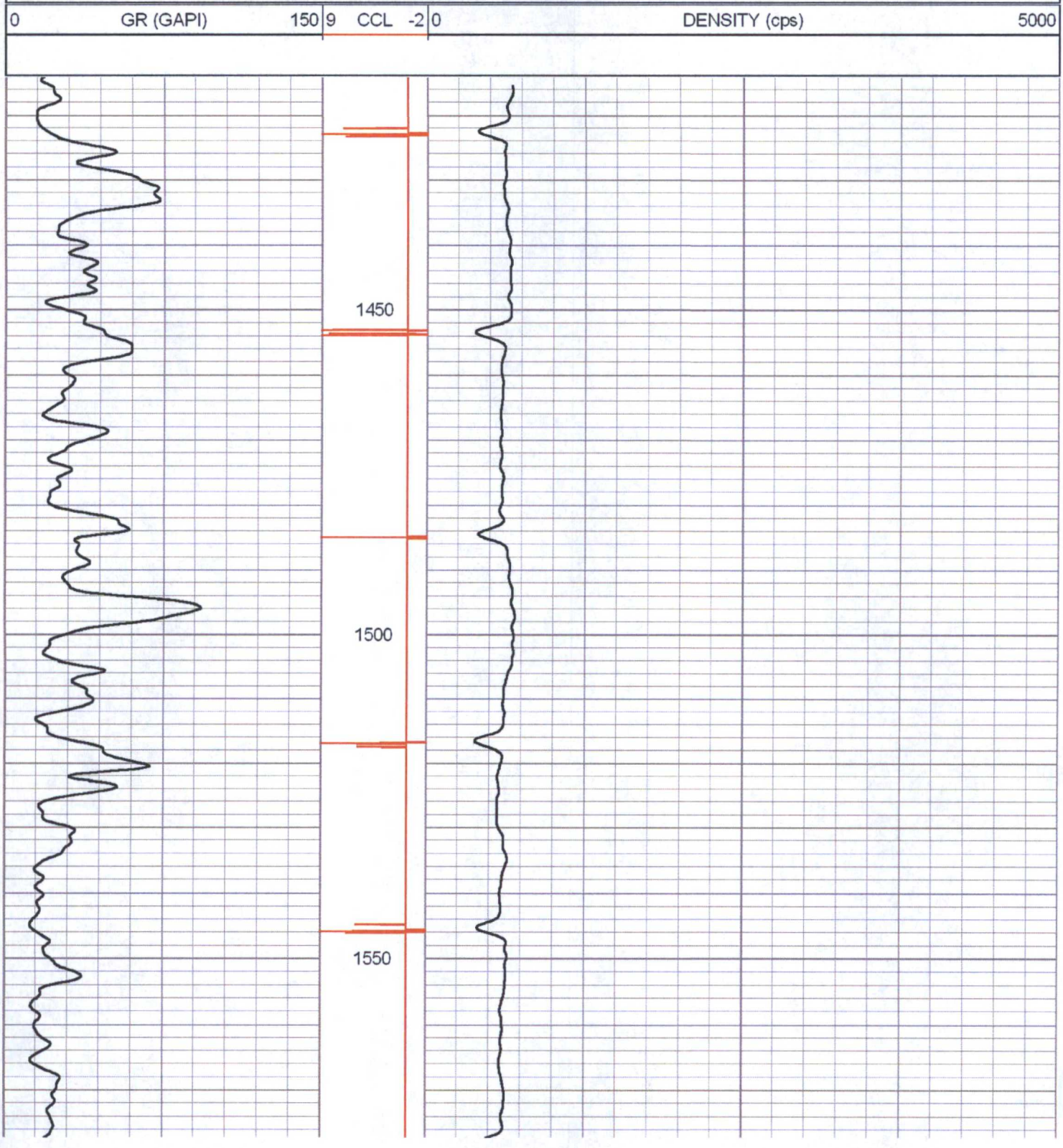


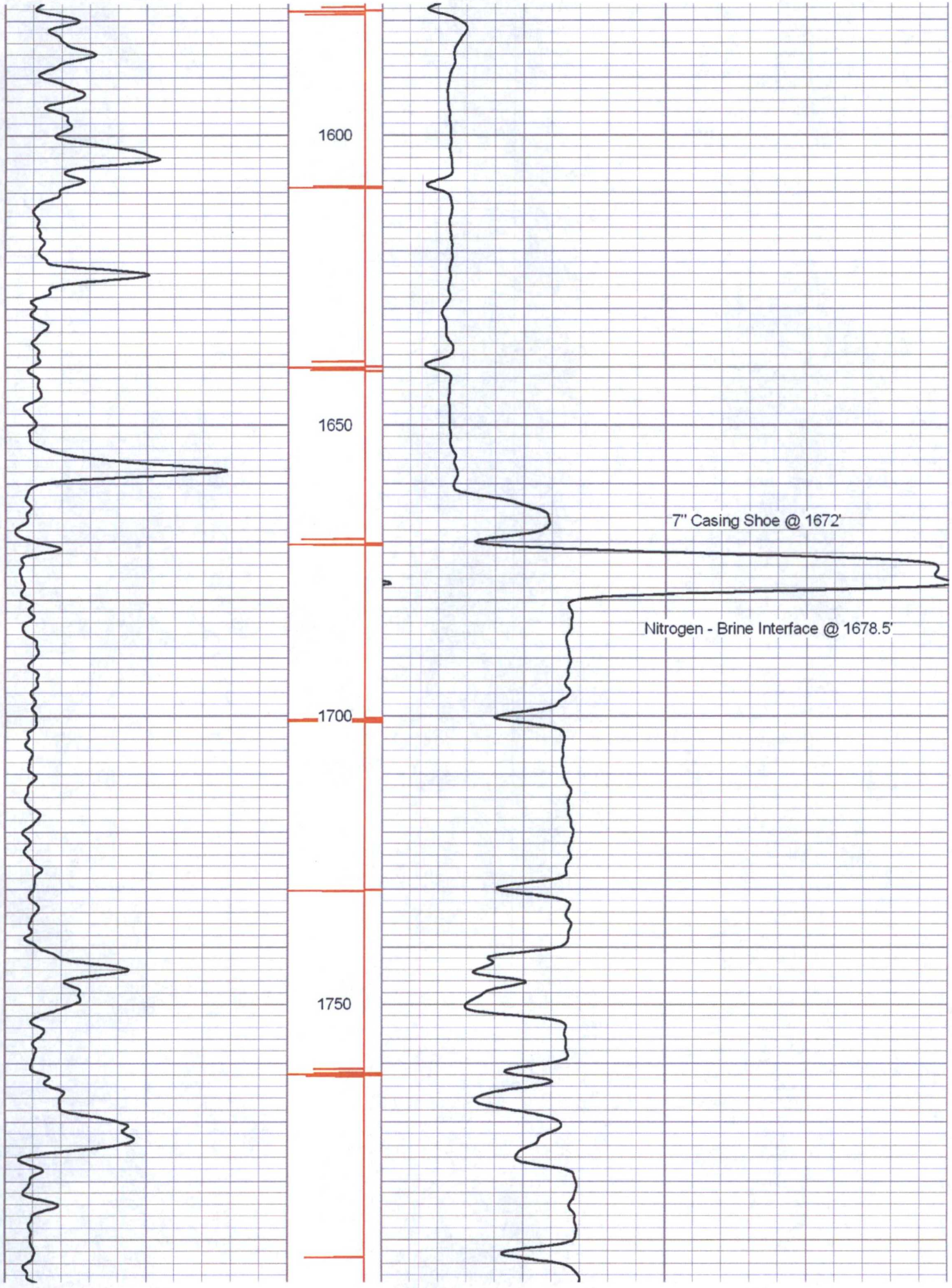

Blue - Start Pass
Red - Finish Pass
1650
Nitrogen - Brine Interface @ 1664'
7" Casing Shoe @ 1672'
1700
1750
1800
0
GR11p (GAPI)
150
CCL11p
9
-2
0
NEU11p (cps)
5000
0
NEU9p (cps)
5000

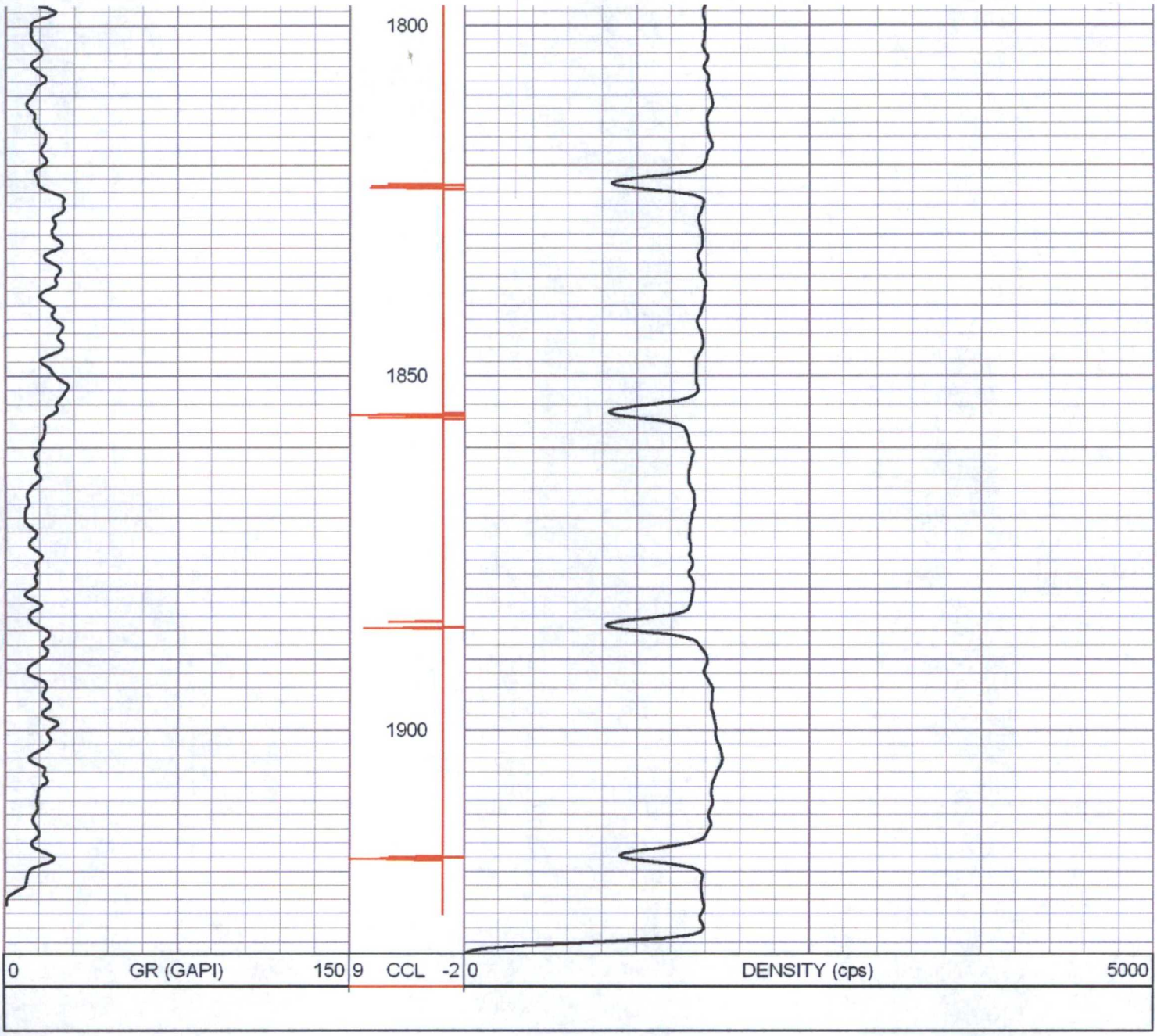
Casedhole Solutions

POST INJECTION

Database File:	western refining #2.db
Dataset Pathname:	pass43
Presentation Format:	gr-n-ccl
Dataset Creation:	Thu Apr 28 21:31:19 2016 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240



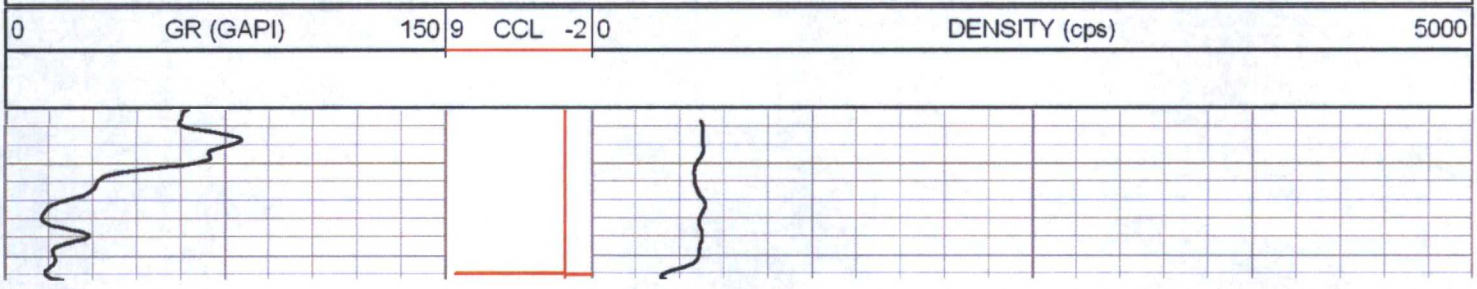

1600
1650
7" Casing Shoe @ 1672'
Nitrogen - Brine Interface @ 1678.5'
1700
1750

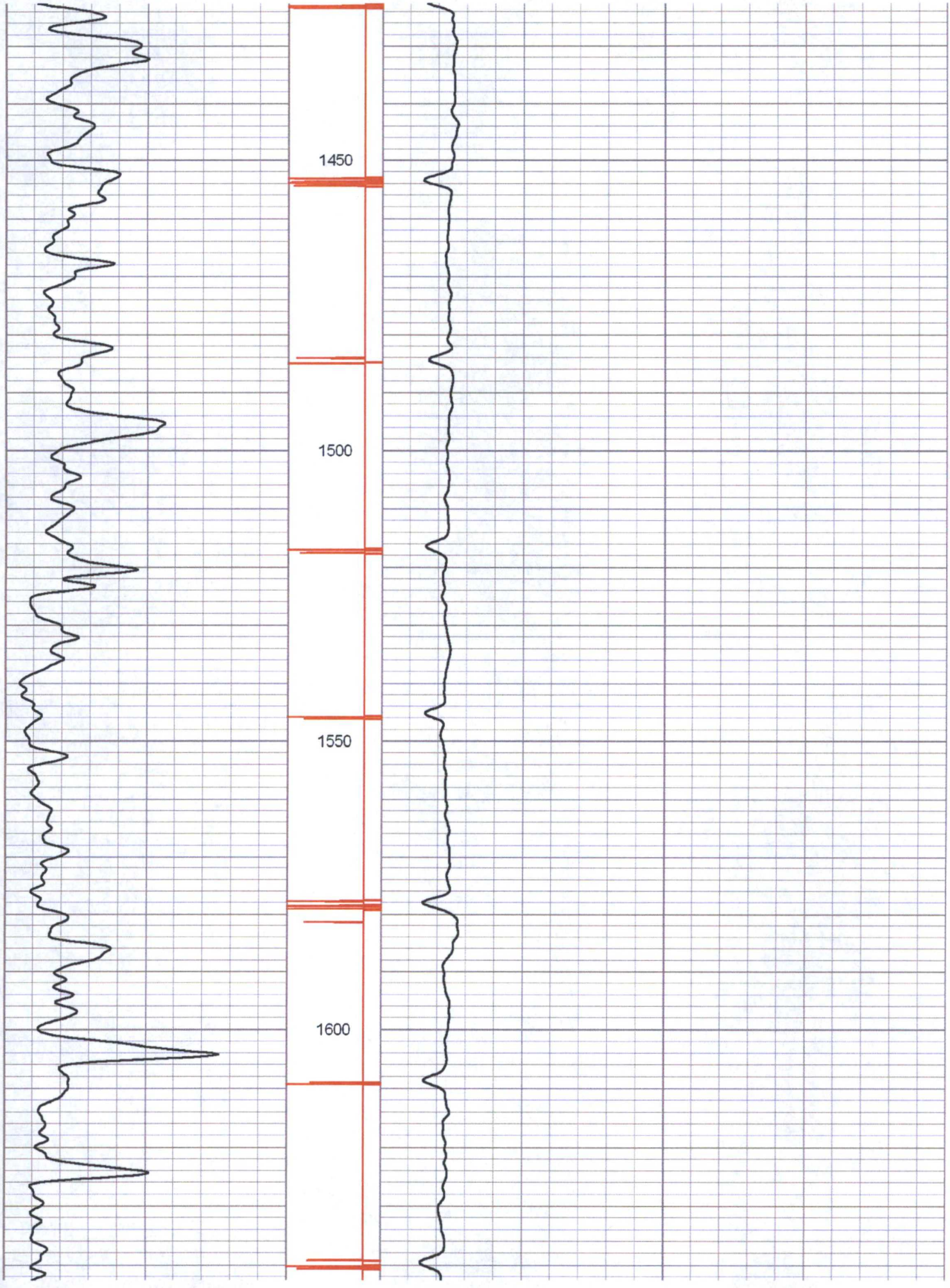


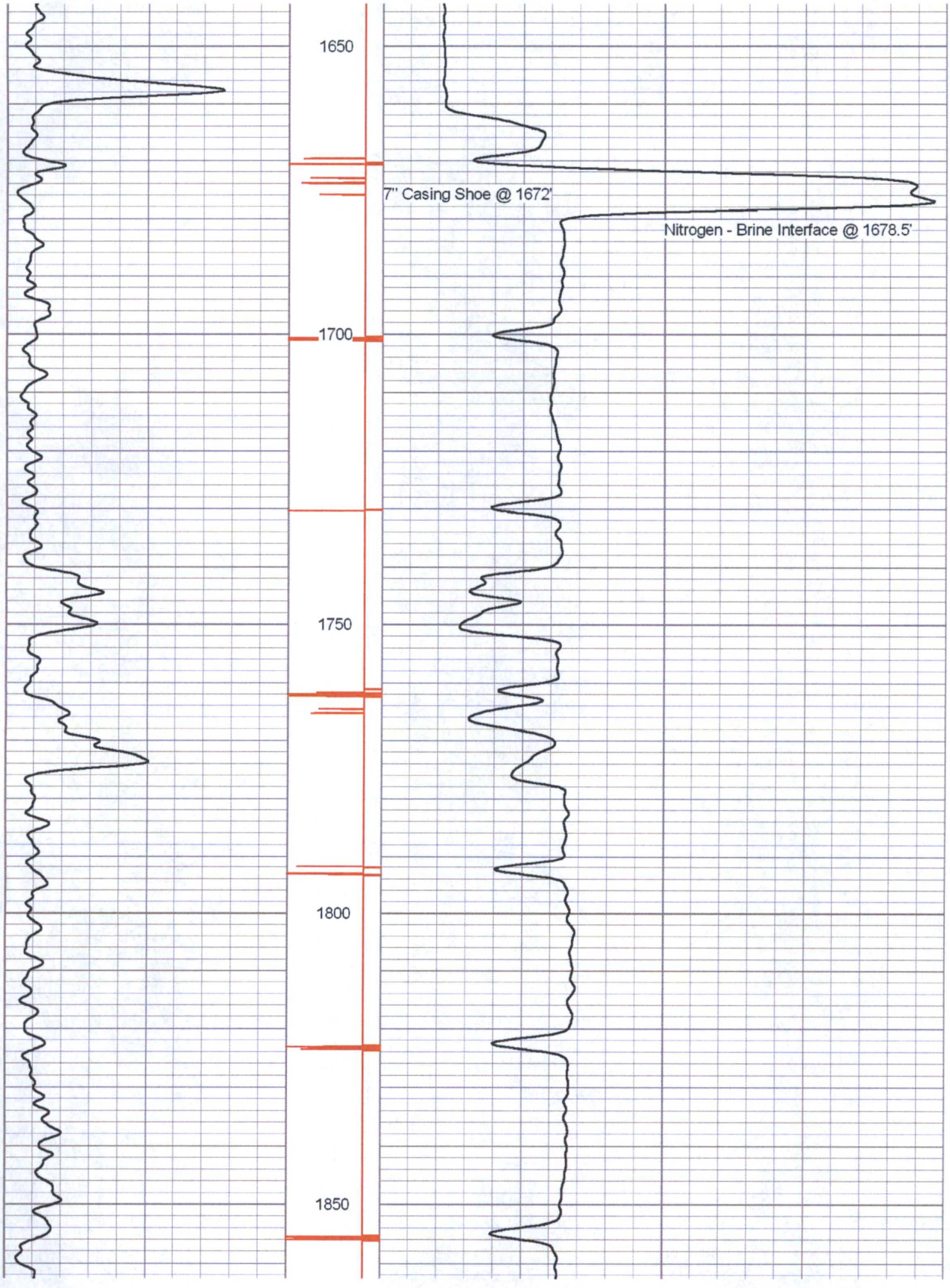
Casedhole Solutions

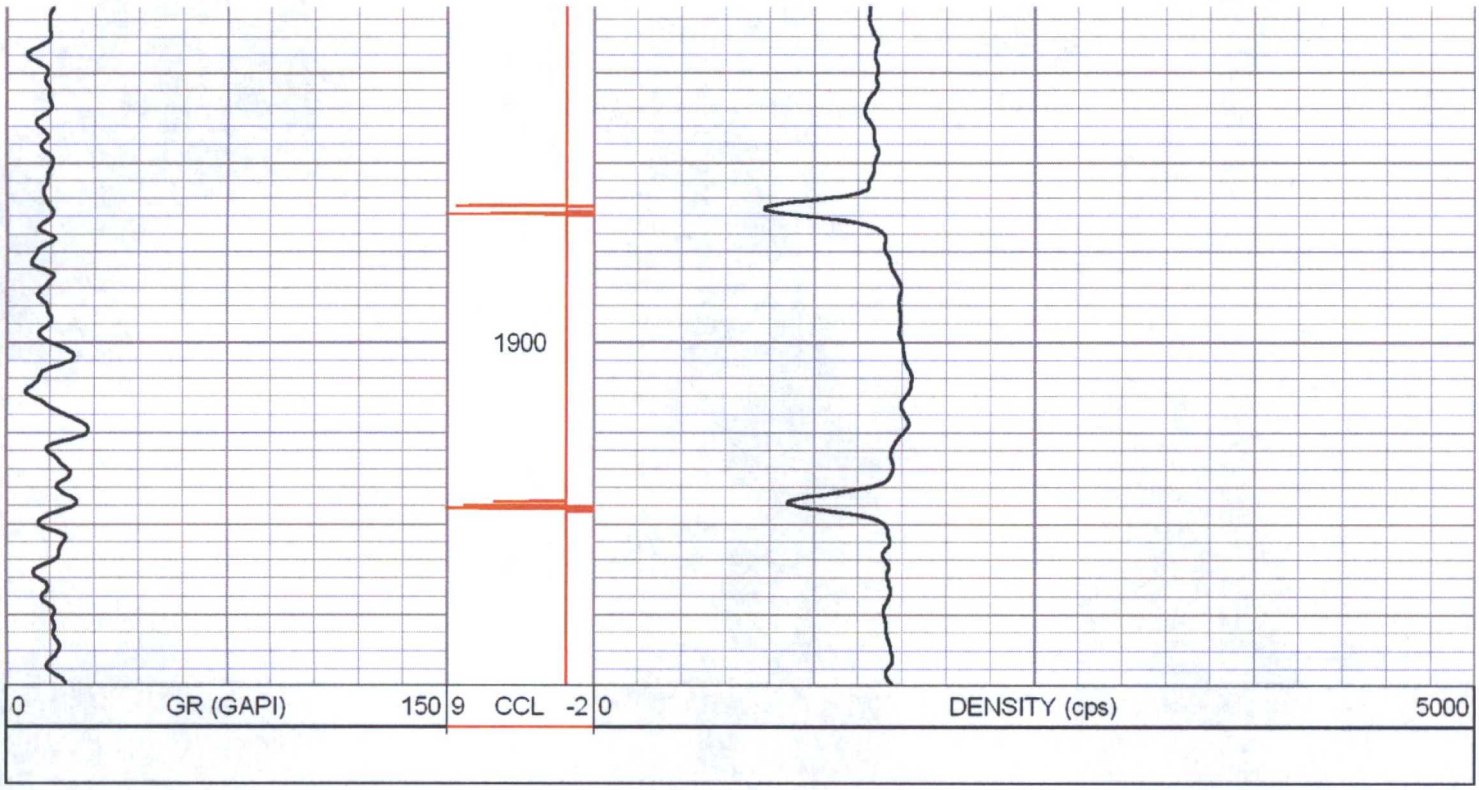
INITIALIZATION PASS

Database File:	western refining #2.db
Dataset Pathname:	pass45
Presentation Format:	gr-n-ccl
Dataset Creation:	Fri Apr 29 09:00:44 2016 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240




1450
1500
1550
1600

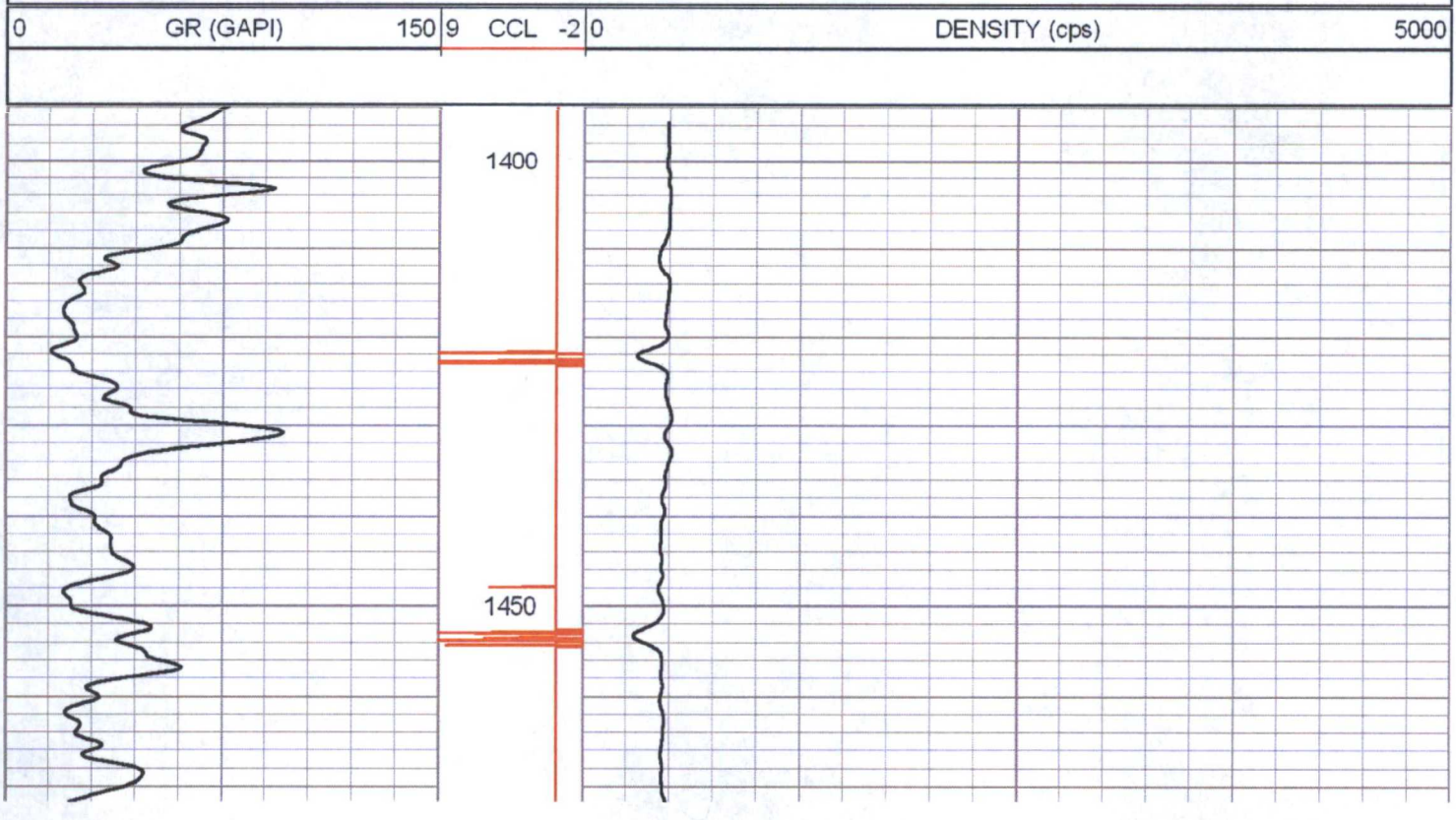

1650
7" Casing Shoe @ 1672'
Nitrogen - Brine Interface @ 1678.5'
1700
1750
1800
1850

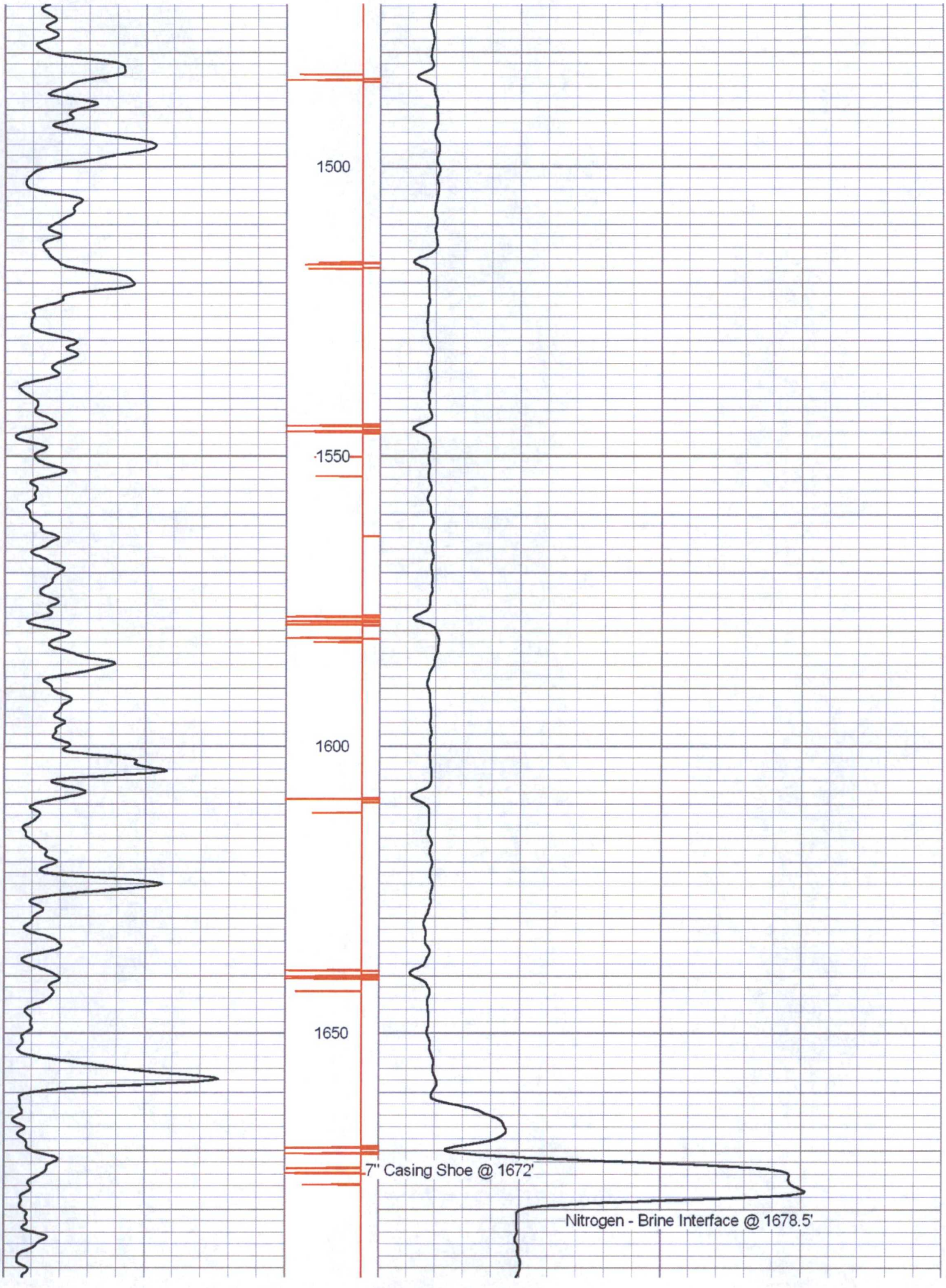


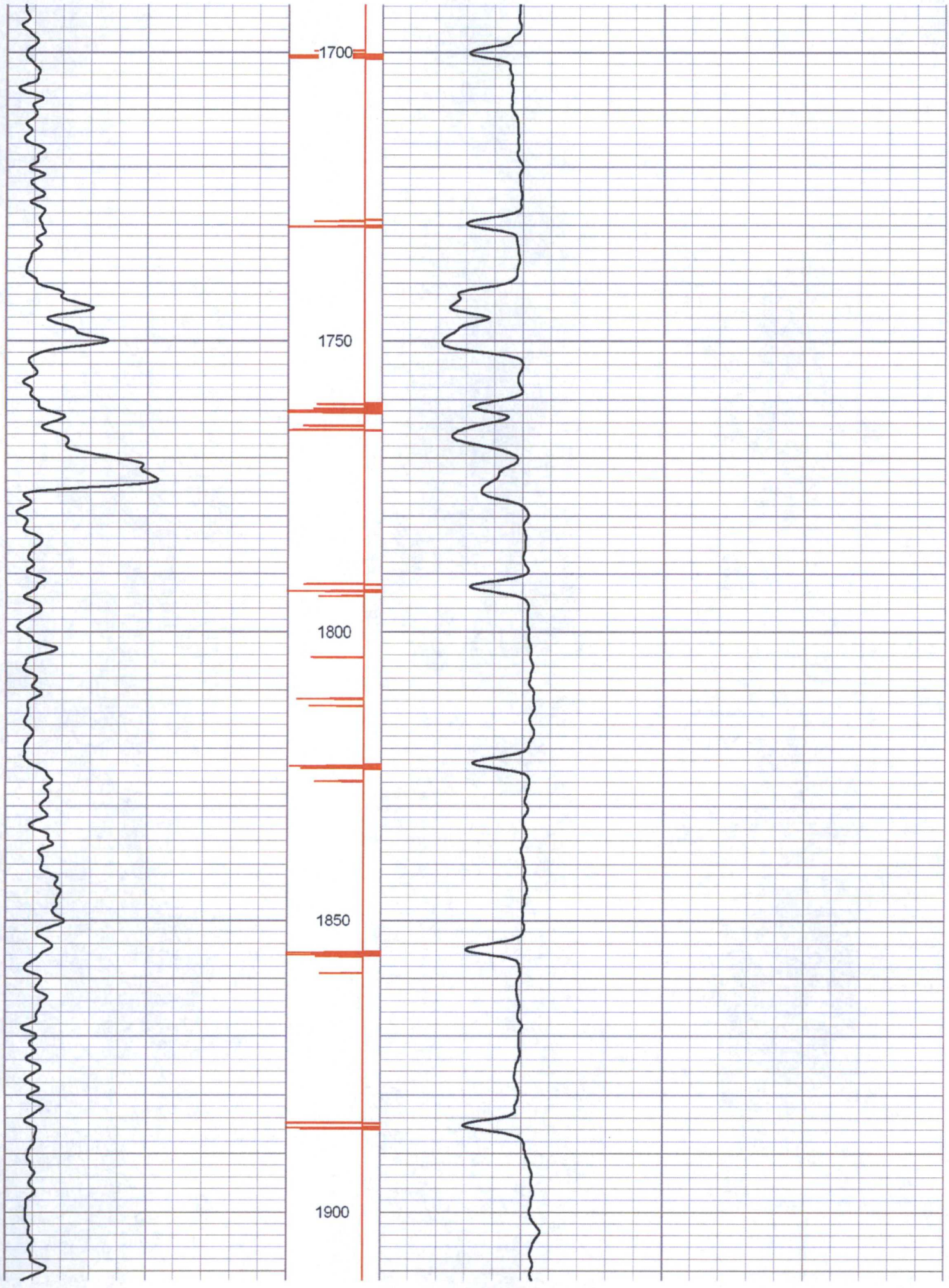
Casedhole Solutions

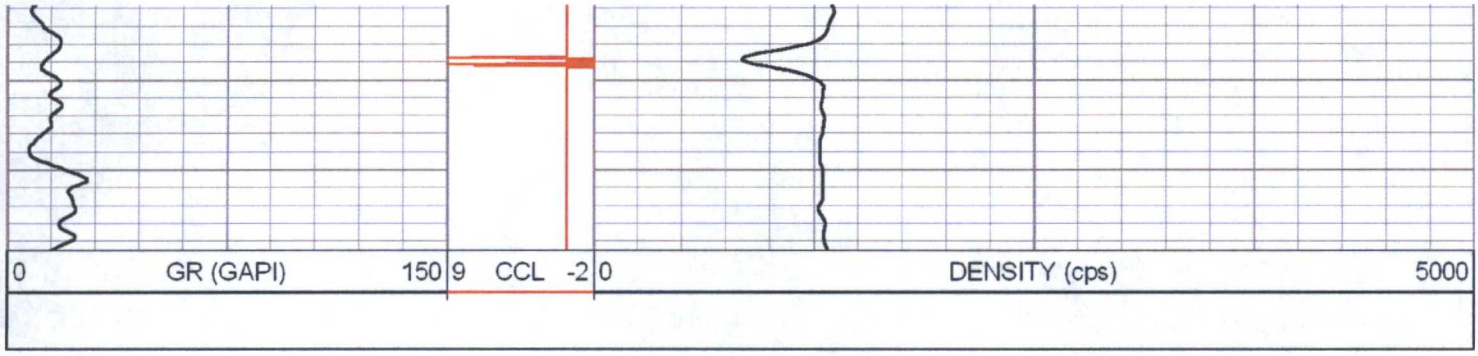
FINALIZATION PASS

Database File:	western refining #2.db
Dataset Pathname:	pass47
Presentation Format:	gr-n-ccl
Dataset Creation:	Mon May 02 09:01:06 2016 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240




1500
1550
1600
1650
7" Casing Shoe @ 1672'
Nitrogen - Brine Interface @ 1678.5'

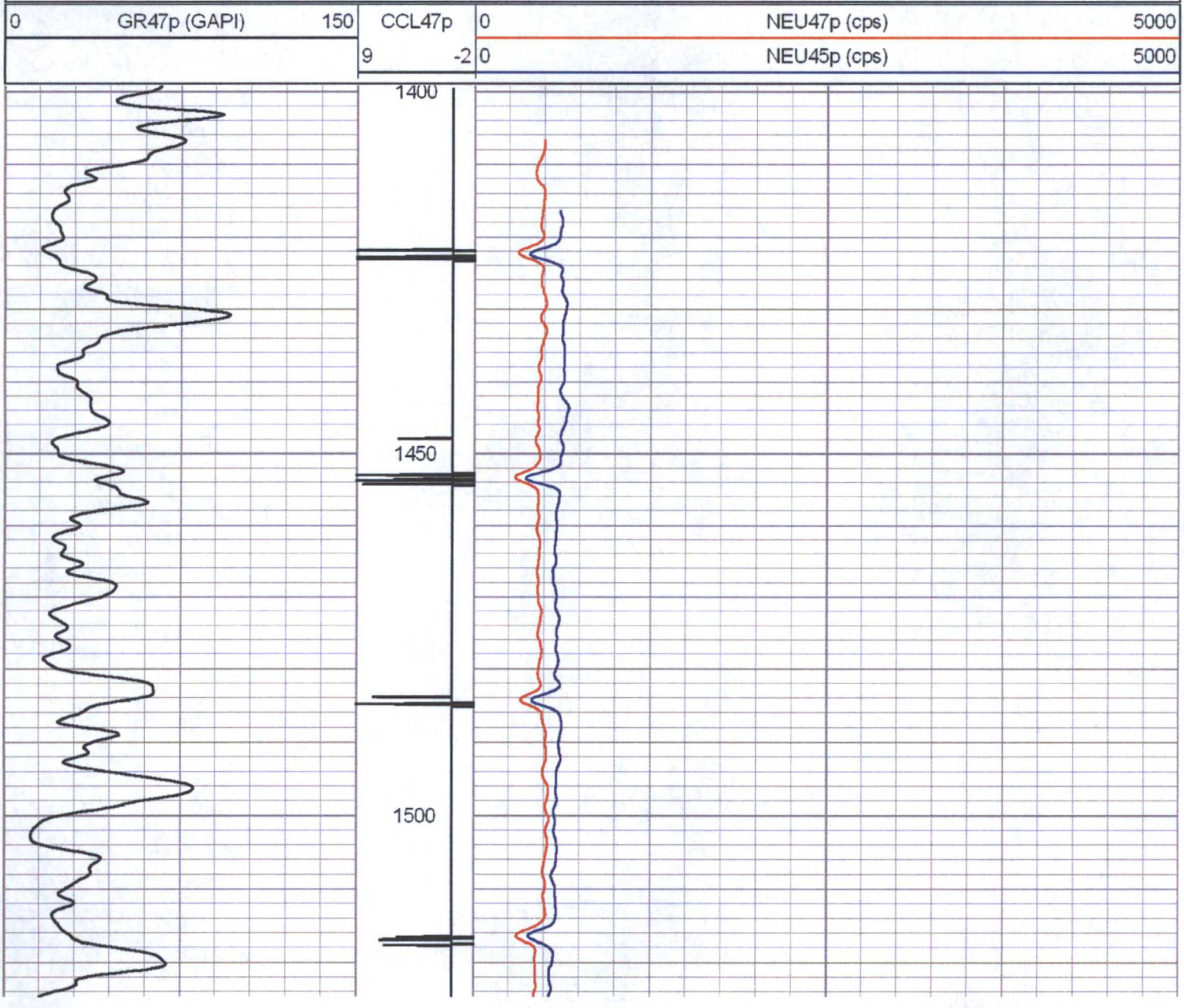

1700
1750
1800
1850
1900

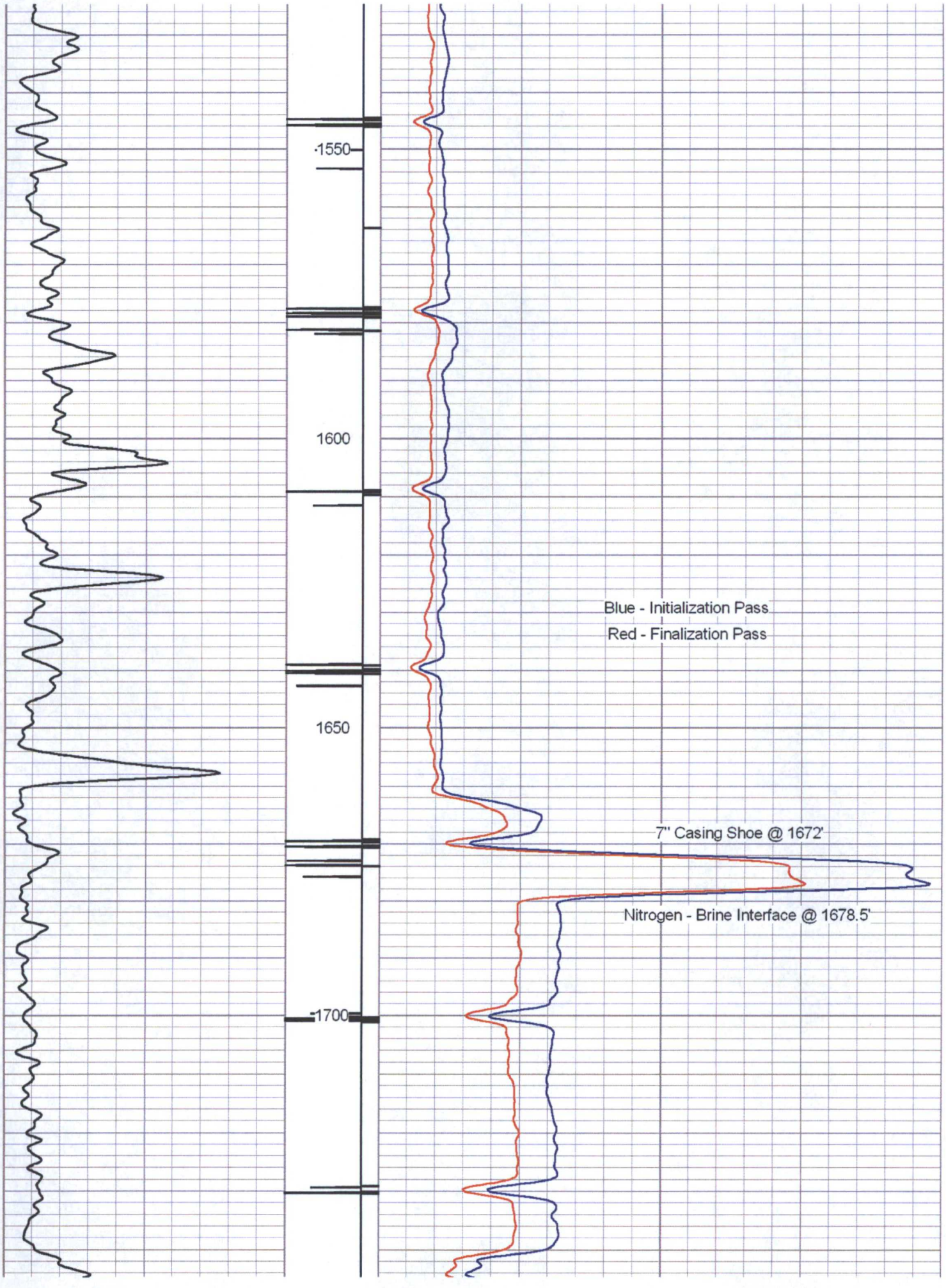


Casedhole Solutions

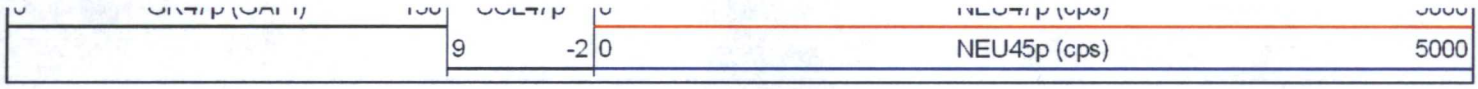
DENSITY MERGE

Database File:	western refining #2.db
Dataset Pathname:	pass47m
Presentation Format:	gr-n-ccl
Dataset Creation:	Wed May 25 08:22:33 2016
Charted by:	Depth in Feet scaled 1:240




1550
1600
1650
1700
Blue - Initialization Pass
Red - Finalization Pass
7" Casing Shoe @ 1672'
Nitrogen - Brine Interface @ 1678.5'


1750
1800
1850
1900
1950
0
GR47p (GAPI)
150
CCL47p
0
NEU47p (cps)
5000


0
9
-2
0
NEU45p (cps)
5000

Casedhole Solutions

MIT TEMPERATURE MERGE

Company WESTERN REFINING COMPANY
Well STATE LPG WELL #2
Field JAL
County LEA
State NEW MEXICO Country

Location: API # : 30-025-35955

SEC M-32TWP 23S RGE 37E

Other Services

Elevation

Permanent Datum Elevation 3303
Log Measured From BOTTOM FLANGE
Drilling Measured From

K.B.
D.F.
G.L. 3303

Date	4-27-16		
Run Number	ONE		
Depth Driller			
Depth Logger	1935		
Bottom Logged Interval	1935		
Top Log Interval	SURFACE		
Open Hole Size			
Type Fluid	WATER		
Density / Viscosity			
Max. Recorded Temp.			
Estimated Cement Top			
Time Well Ready			
Time Logger on Bottom			
Equipment Number	0839		
Location	HUTCHINSON KS.		
Recorded By	WILL GEORGE		
Witnessed By	THOMASON		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9-5/8"	36 lb/ft	Surface	250'
Prot. String				
Production String	7"	23 lb/ft	Surface	1672'
Liner	5-1/2"	15.5		1656'
Tubing	2.875"	6.5 LB/FT	Surface	1954'

<< Fold Here >>>

Comments

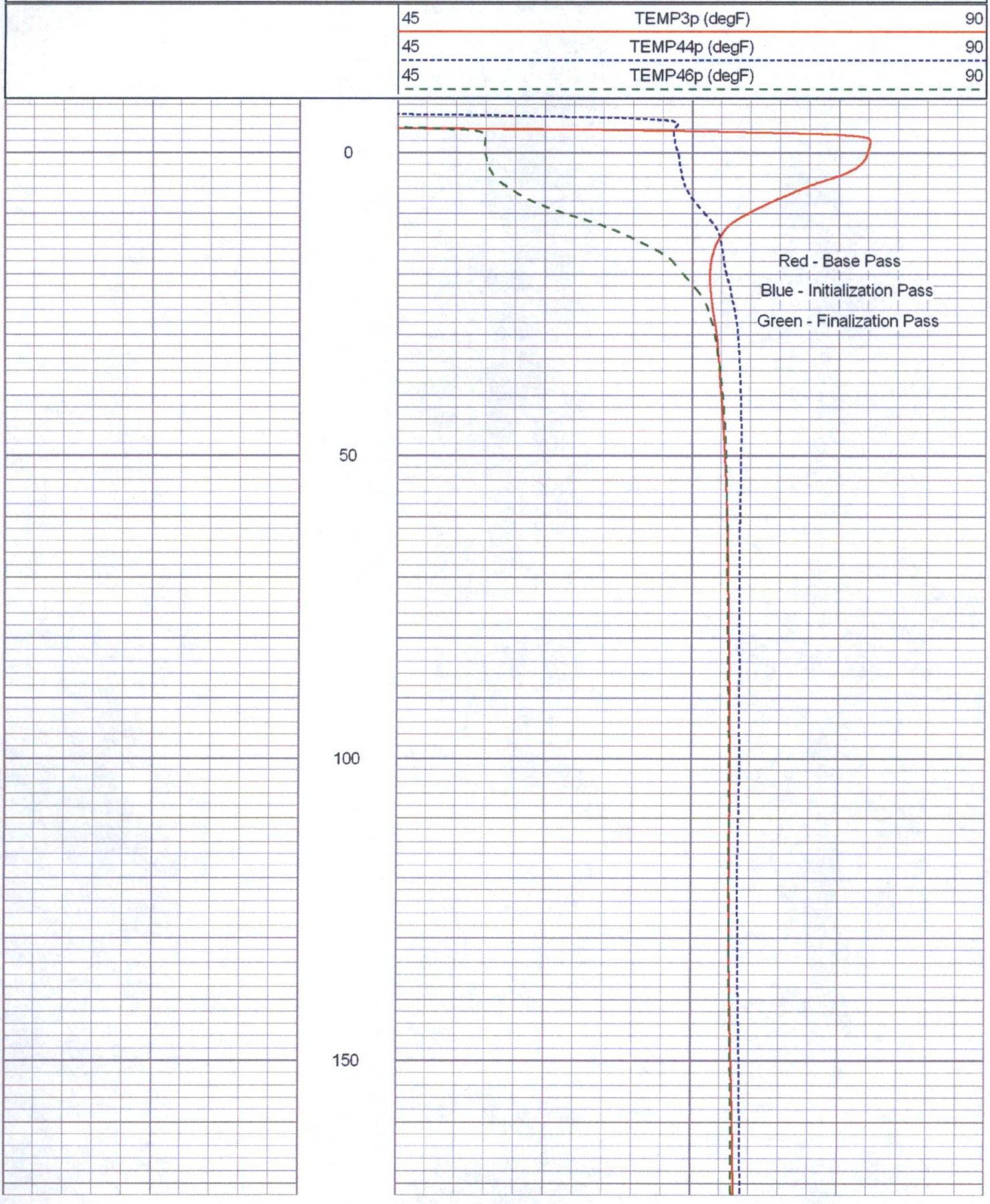
THANK YOU FOR USING CASEDHOLE SOULTIONS

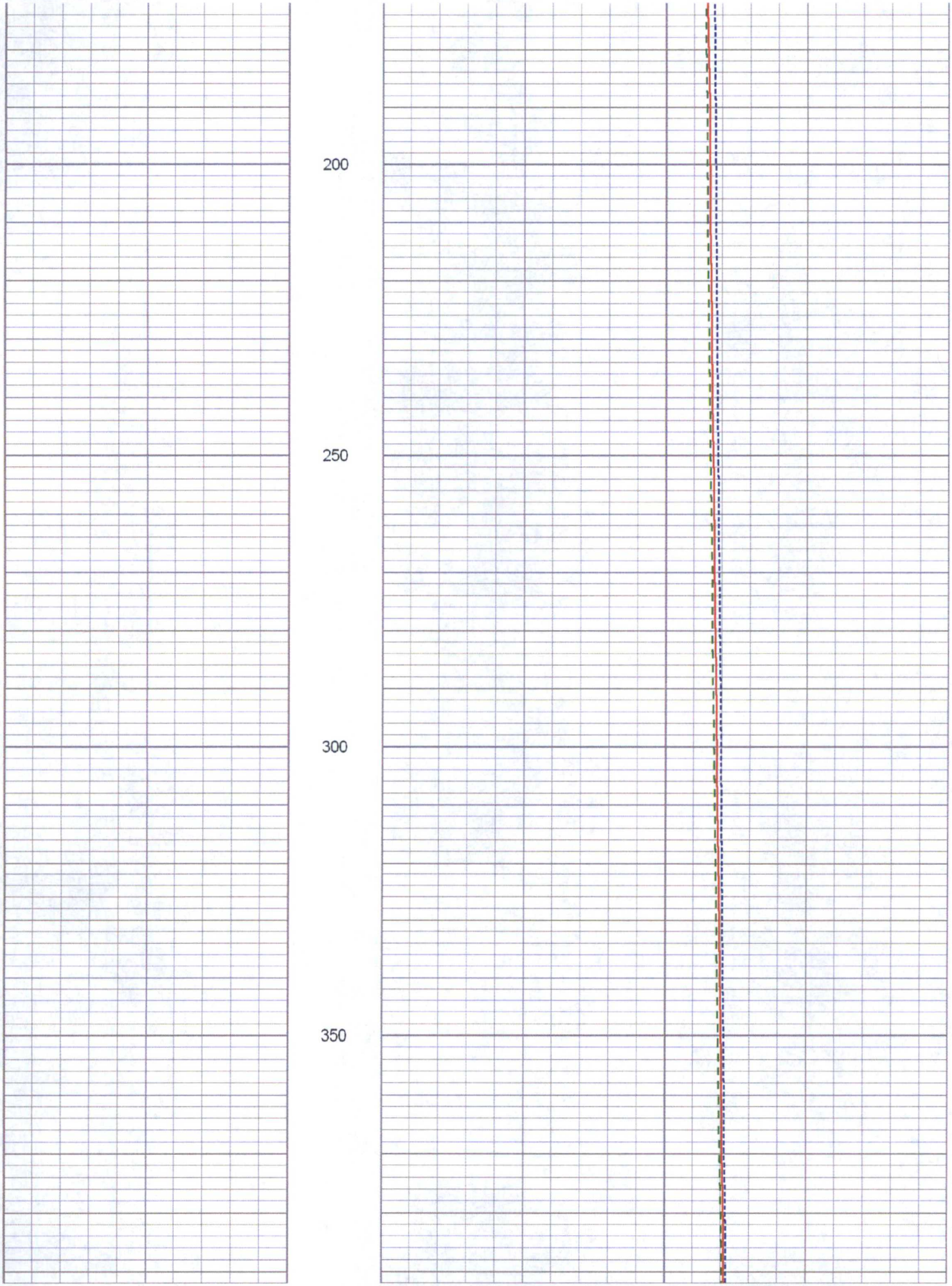
Company WESTERN REFINING COMPANY
Well STATE LPG WELL #2
Field JAL
County LEA
State NEW MEXICO Country

Casedhole Solutions

TEMPERATURE MERGE

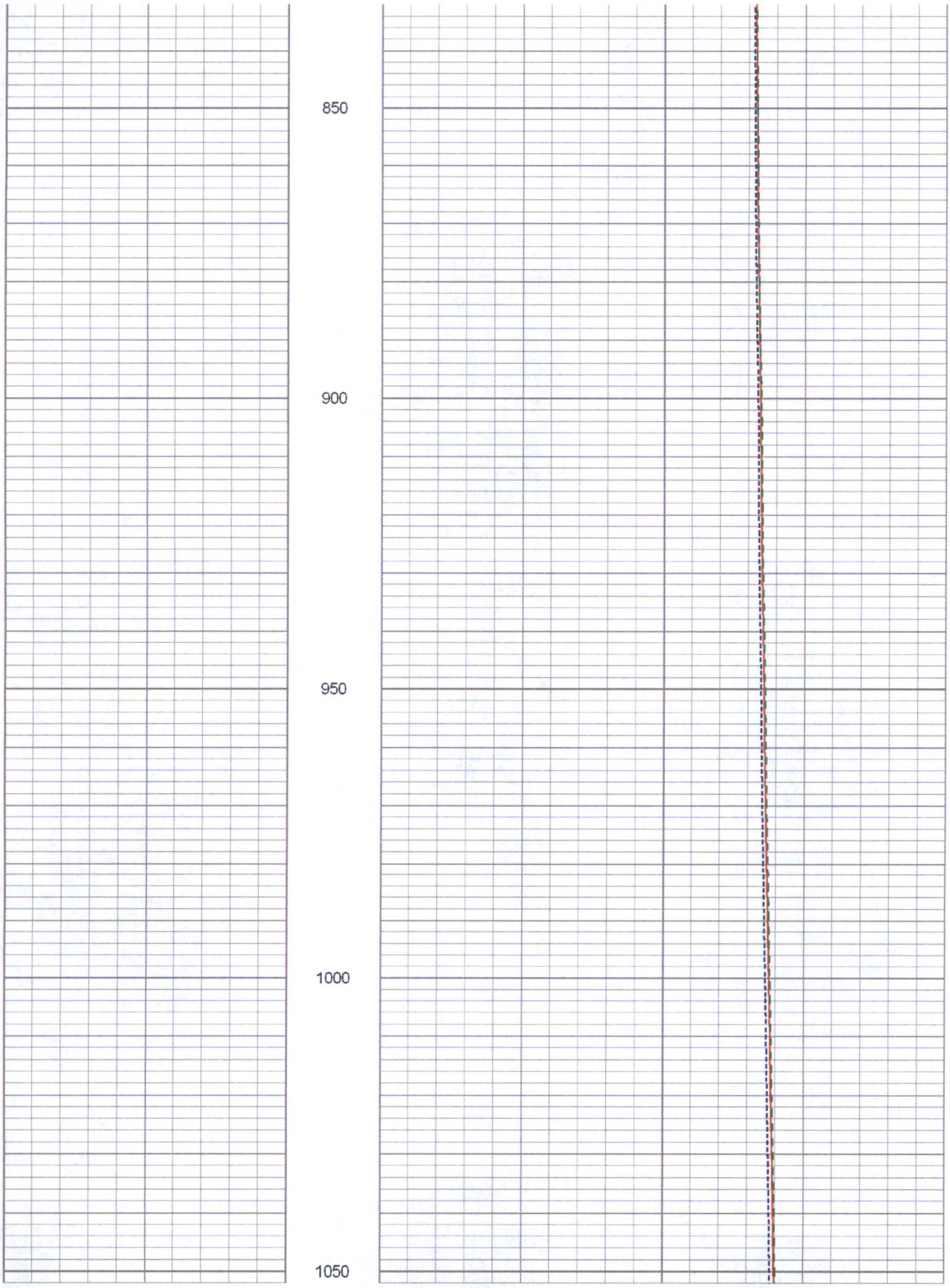
Database File:	western refining #2.db
Dataset Pathname:	pass3TM
Presentation Format:	temp
Dataset Creation:	Thu May 12 17:00:57 2016
Charted by:	Depth in Feet scaled 1:240



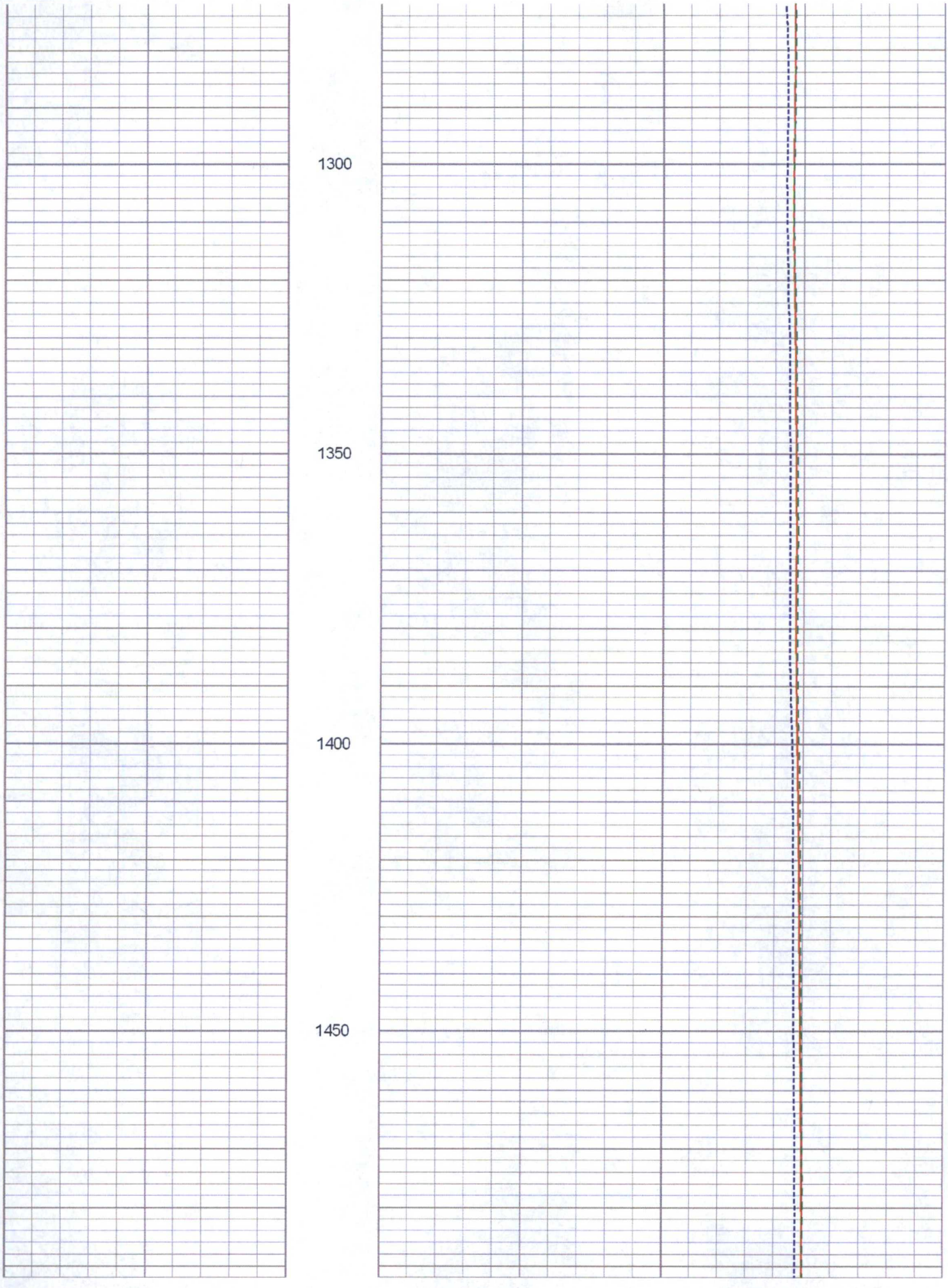

200
250
300
350

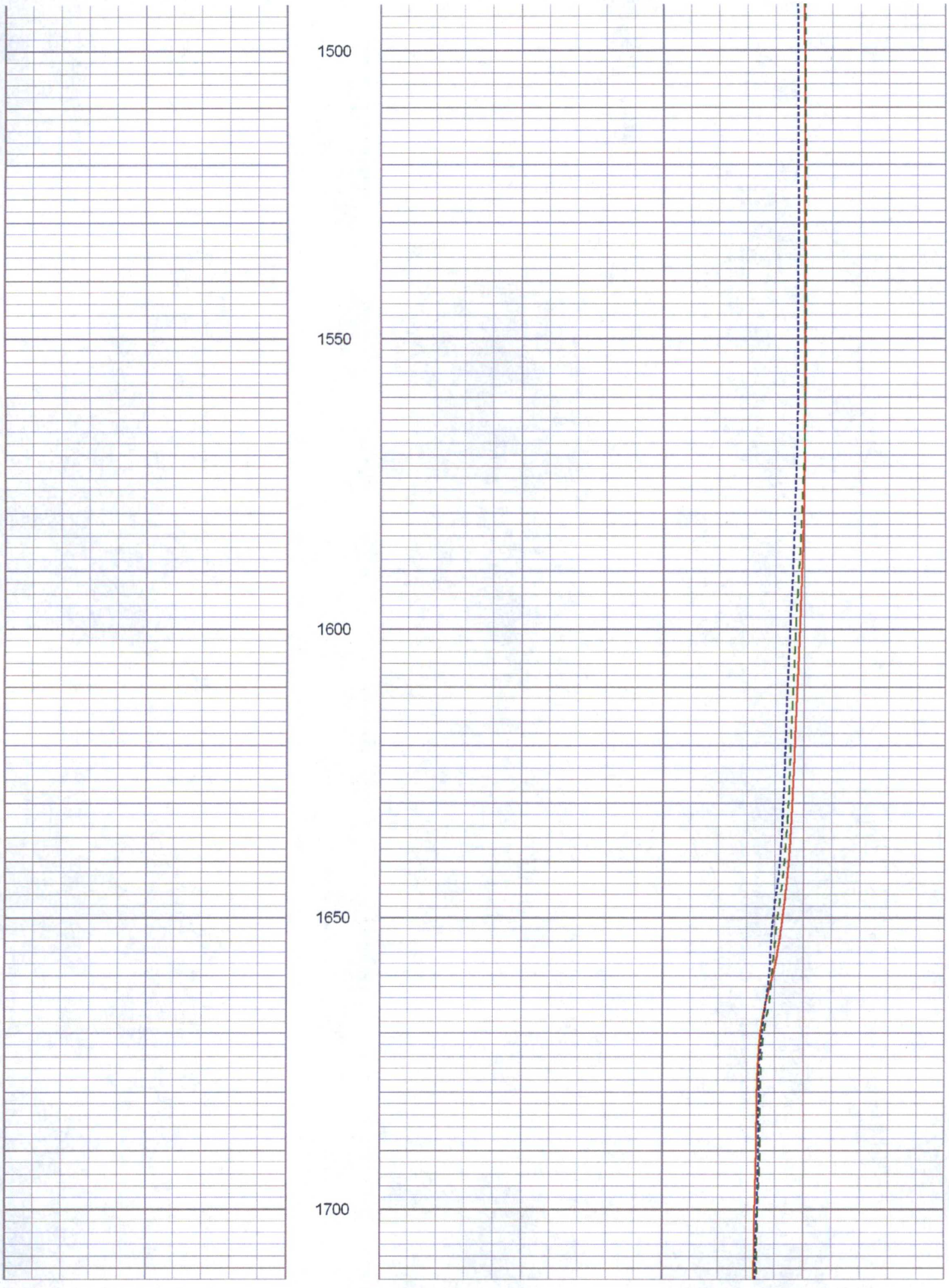

400
450
500
550
600

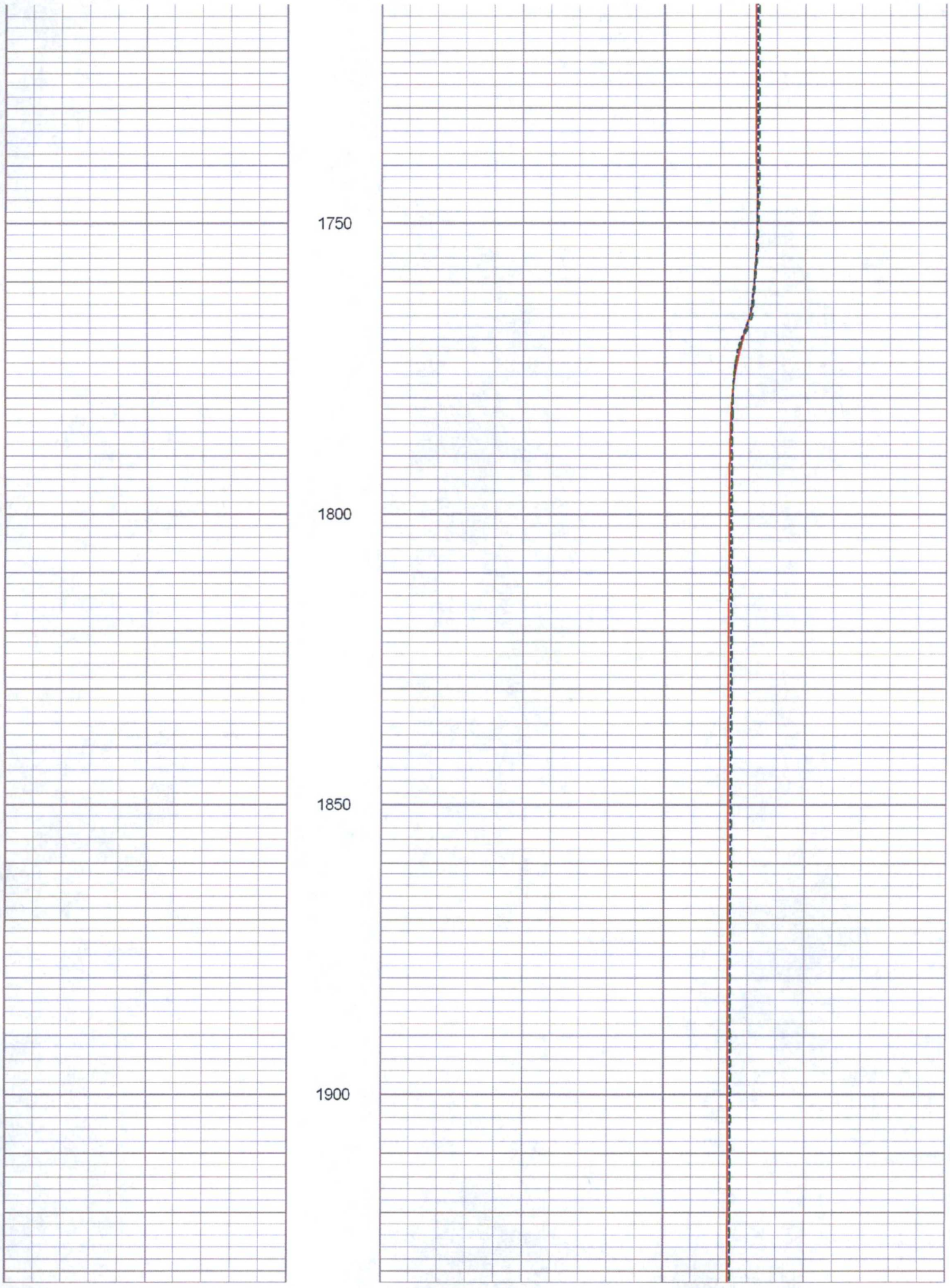

650
700
750
800

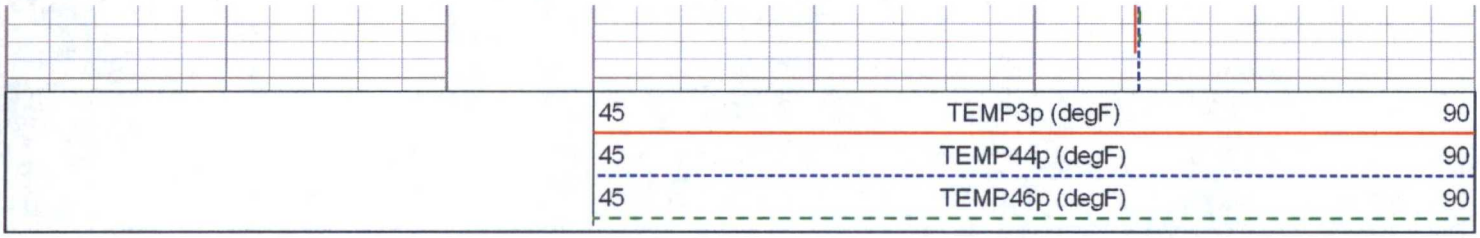

850
900
950
1000
1050


1100
1150
1200
1250


1300
1350
1400
1450


1500
1550
1600
1650
1700


1750
1800
1850
1900


45
TEMP3p (degF)
90
45
TEMP44p (degF)
90
45
TEMP46p (degF)
90