

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 33019
Name: Rosewood Resources, Inc.
Address: 2711 N. Haskell Ave., Suite 2800, LB 22
City/State/Zip: Dallas, TX 75201
Purchaser: _____
Operator Contact Person: Tom Roelfs
Phone: (970) 324-1686
Contractor: Name: Mann Drilling Company
License: N/A
Wellsite Geologist: Steven VonFeldt

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator: _____
Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back Plug Back Total Depth
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Enhr.?) Docket No. _____

| | | |
|-----------------------------------|-------------------|---|
| <u>09/08/2006</u> | <u>09/12/2006</u> | <u>09/13/2006</u> |
| Spud Date or Recompletion Date | Date Reached TD | Completion Date or Recompletion Date |

API No. 15 - 181-20461-01-00
County: Sherman
SW SW SW NE Sec. 21 Twp. 7 S. R. 39 East West
2589 feet from S (circle one) Line of Section
2585 feet from (circle one) E / W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW SW
Lease Name: C Ihrig Well #: 32-21H

Field Name: Goodland
Producing Formation: Niobrara
Elevation: Ground: 3621' Kelly Bushing: 3628'
Total Depth: 3292' Plug Back Total Depth: 3264'
Amount of Surface Pipe Set and Cemented at 393' KB Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set 1282 Feet
If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ sx cmt.

Drilling Fluid Management Plan AH I NR
(Data must be collected from the Reserve Pit) 10-22-08
Chloride content 5000 ppm Fluid volume 200 bbls
Dewatering method used Evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Jannell Gevel
Title: Production Asst Date: 12-19-06
Subscribed and sworn to before me this 19 day of December,
20 06.
Notary Public: Kathy Roelfs
Date Commission Expires: 6-3-09

KCC Office Use ONLY

Letter of Confidentiality Received N
If Denied, Yes Date: _____
Wireline Log Received
Geologist Report Received
UIC Distribution

NOTARY PUBLIC - State of Kansas
KATHY ROELFS
My Appt. Exp. 6-3-09

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KANSAS CORPORATION COMMISSION
DEC 26 2006
CONSERVATION DIVISION
WICHITA KS

Operator Name: Rosewood Resources, Inc. Lease Name: C Ihrig Well #: 32-21H
 Sec. 21 Twp. 7 S. R. 39 East West County: Sherman

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

| | |
|---|---|
| Drill Stem Tests Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i> List All E. Logs Run: GR | <input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum Niobrara 1038' KB |
|---|---|

| CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used | | | | | | | |
|---|-------------------|---------------------------|------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. | | | | | | | |
| Purpose of String | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs./ Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| Surface | 9 1/2" | 7" | 17# | 393' | Neat | 103 | |
| Intermediate | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Production | 6 1/8" | 4 1/2" | 10.5# | 3264' | Type 1 | 50 | 2% Cacl. |

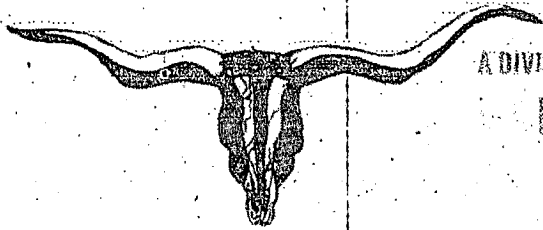
| ADDITIONAL CEMENTING / SQUEEZE RECORD | | | | |
|--|------------------|----------------|-------------|----------------------------|
| Purpose: | Depth Top Bottom | Type of Cement | #Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone | | | | |

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i> | |
|----------------|---|--|-------|
| | | Amount | Depth |
| 4 | 3179' to 3194' | n/a | |
| | | | |
| | | | |
| | | | |

| | | | | | |
|--|-----------|--|-------------|---------------|---|
| TUBING RECORD | | Size | Set At | Packer At: | Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Date of First, Resumerd Production, SWD or Enhr. 11/27/2006 | | Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) | | | |
| Estimated Production Per 24 Hours | Oil Bbls. | Gas Mcf | Water Bbls. | Gas-Oil Ratio | Gravity |
| | | 45 | | | |

| | | |
|---|--|---------------------|
| Disposition of Gas | METHOD OF COMPLETION | Production Interval |
| <input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i> | <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____ | _____ |

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CONSERVATION DIVISION
WICHITA, KS



A DIVISION OF ADVANCED DRILLING TECHNOLOGIES, LLC.

LONGHORN CEMENTING CO.

P.O. BOX 203, YUMA, COLORADO 80759
 Phone: 970-848-0799 Fax: 970-848-0798

**FIELD SERVICE TICKET
 AND INVOICE**

0849

DATE 9-13-06 TICKET NO.

| | | | | | | | | | |
|------------------------------------|-------------------------|---|-----------------------------------|-------------------------------|------------------------------|--------------------------------|----------------------------|------------|----|
| DATE OF JOB <u>9-13-06</u> | DISTRICT | NEW WELL <input checked="" type="checkbox"/> | OLD WELL <input type="checkbox"/> | PROD <input type="checkbox"/> | INJ <input type="checkbox"/> | WDW <input type="checkbox"/> | CUSTOMER ORDER NO. | | |
| CUSTOMER <u>Rosewood</u> | | LEASE <u>C. J. H. 19</u> | <u>32-21 H</u> | WELL NO. | | | | | |
| ADDRESS | | COUNTY | STATE | | | | | | |
| CITY | STATE | SERVICE CREW <u>Brian & Van</u> | | | | | | | |
| AUTHORIZED BY | EQUIPMENT <u>111</u> | | | | | | | | |
| TYPE JOB <u>Longstring</u> | DEPTH | FT. | CEMENT DATA | FLK <input type="checkbox"/> | SAND DATA | SACKS <input type="checkbox"/> | TRUCK CALLED | | |
| SIZE HOLE <u>6 1/8</u> | DEPTH | FT. | SACKS | BRAND | TYPE | % GEL | ADMITTED | | |
| SIZE & WT. CASTING <u>9 1/2</u> | DEPTH | FT. | <u>50</u> | <u>A</u> | <u>7-II</u> | | | | |
| SIZE & WT. D PIPE OR TUBING | DEPTH | FT. | | | | | DATE | AM | |
| TOP PLUGS | TYPE | WEIGHT OF SLURRY <u>14.8</u> LBS. / GALS. / GAL. | | | | | ARRIVED AT JOB | AM | |
| | | VOLUME OF SLURRY <u>1.32</u> cu ft. per sack | | | | | START OPERATION | PM | |
| | | SACKS CEMENT TREATED WITH <u>2</u> % OF <u>Kcl</u> | | | | | FINISH OPERATION | AM | |
| <u>DBTD 12 83</u> | MAX DEPTH | FT. | MAX PRESSURE <u>1800</u> PSI | | | | | RELEASED | PM |
| | | | | | | | MILES FROM STATION TO WELL | <u>100</u> | |

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without written consent of an officer of Advanced Drilling Technologies, LLC.

SIGNED:

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

| ITEM / PRICE REF. NUMBER | MATERIAL, EQUIPMENT AND SERVICES USED | UNIT | QUANTITY | UNIT PRICE | \$ AMOUNT |
|--------------------------|---------------------------------------|------|-----------|------------|-----------|
| 001-1 | Depth Charge | | | | 1500 00 |
| 100-1 | Mileage | | 200 miles | | 2170 00 |
| 200-1 | Cement per Sack | | 50 | | 875 00 |
| 300-2 | 4 1/2 Accu-Seal Float Shoe | | 1 | | 267 27 |
| 300-4 | 4 1/2 Latchdown plug & Baffle | | 1 | | 226 00 |
| 300-6 | 4 1/2 Centralizers | | 6 | | 215 04 |
| 300-7 | 4 1/2 Cement Baskets | | 2 | | 300 00 |
| 300-9 | 4 1/2 Cable Scratchers | | 8 | | 278 40 |
| 300-12 | 7 1/2 Centralizer | | 1 | | 36 44 |
| 400-2 | clay Gels | | 2.5 | | 236 25 |
| 400-4 | Kcl | | 100 lb | | 40 30 |
| 1741 | mw Flush | 5.4 | | | 6144 90 |
| 1745 | Cement | 12.3 | | | |
| 1750 | Displacement | 20.6 | | | |
| 1800 | Bump plug | 1800 | | | |

SUB TOTAL

| ACID DATA: | | | |
|------------|---|-----------|--|
| GALLONS | % | ADDITIVES | |
| HCL | | | |
| HCL | | | |

| | |
|---------------------|-------------|
| SERVICE & EQUIPMENT | % TAX ON \$ |
| MATERIALS | % TAX ON \$ |
| TOTAL | |

SERVICE REPRESENTATIVE
 FIELD SERVICE ORDER NO.

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

RECEIVED
 KANSAS CORPORATION COMMISSION
 (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

DEC 26 2006

CONSERVATION DIVISION
 WICHITA, KS

SCHAAL DRILLING, CO.
PO BOX 416
BURLINGTON, CO. 80807
719-346-8032
FIELD REPORT

SURFACE CASING, DRILLING AND CEMENTING

DRILLING DATE 9-08-06

WELL NAME & LEASE # Ibrig C 32-21H

MOVE IN, RIG UP, DIG PITS ETC. DATE 9-07-06 TIME 2:30 AM PM

SPUD TIME 7:00 AM PM SHALE DEPTH 300 TIME 8:45 AM PM

HOLE DIA. 9 1/2 FROM 0 TO 385 TD TIME 9:30 AM PM

CIRCULATE, F.O.O.H., SET 380.49 FT CASING 393.49 KB FT DEPTH

9 JOINTS 7 0D #/FT 14 15.5 17 20 23

PUMP 103 SAC CEMENT 575 GAL DISP. CIRC. 2 1/2 BBL TO PIT

PLUG DOWN TIME 11:45 AM PM DATE 9-08-06

CEMENT LEFT IN CSG. 50 FT TYPE: PORTLAND CEMENT I/II ASTM C 150
CENTRALIZER 1 CEMENT COST \$ 1603.06

ELEVATION 3621
+12KB 3633

PIPE TALLY

- 1. 42.23
- 2. 42.32
- 3. 42.35
- 4. 42.33
- 5. 41.85
- 6. 42.33
- 7. 42.40
- 8. 42.35
- 9. 42.33
- 10.
- 11.
- 12.
- 13.
- 14.

TOTAL 380.49

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WICHITA, KS

NQL Energy Services (US), Inc.

Company: Rosewood Resources

Well: #32-21H4

Field: Sherman

County: Sherman

State: KS

Country: US United States

Well ID:

Job Number: H006-0036-4

Location: Sherman County

Other Services: DIR, Survey, Log Gamma

Permanent Datum: 3621'GL+7'KB

Log From: 407'

Drilling From: 3237

Elev.: 3621'

above permanent datum

above permanent datum

Elev KB: KB

Elev DF:

Elev GL:

Run Number: 3

Start Date: 9/10/06

Start Time: 13:30

End Date: 9/13/06

End Time: 21:30

Run Hours:

Run Description: #32-21H-4

Start Log Depth: 407'

End Log Depth: 2723'

Survey Offset: 51

Gamma Offset: 44.00

Pressure Offset: n/a

Resistivity Offset: n/a

Drilling Fluid Type: Water, Soap

Fluid Resistivity: N/A

Density/Viscosity: N/A

Max. Downhole Temp.: 80

Operator 1: Tony Stefano

Operator 2: Joel Forney

TieIn TVD: 0.00

TieIn Inclination: 0.00

TieIn Azimuth: 0.00

EM Transmitter Equipment

Serial Number: 0144

OCV:

Power Setting: Lo

Directional Survey Equipment

Serial Number: 2666

Gamma Ray Equipment

Serial Number: 0103

Measurement Type: DIR, SURVEY, GAMMA

Detector Type: Scintillation

Detector Size: .75"x4"

Calibration Source API: 177

Background CPS: 18

Calibrator CPS: 91

Annular Pressure Equipment

Serial Number: 0103

Full Scale Range: 15000.0

Pipe Pressure Equipment

Serial Number:

Full Scale Range:

BHA

Diameter: 4 3/4

Resistivity Equipment

Serial Number:

Measurement Type:

Full Scale Range:

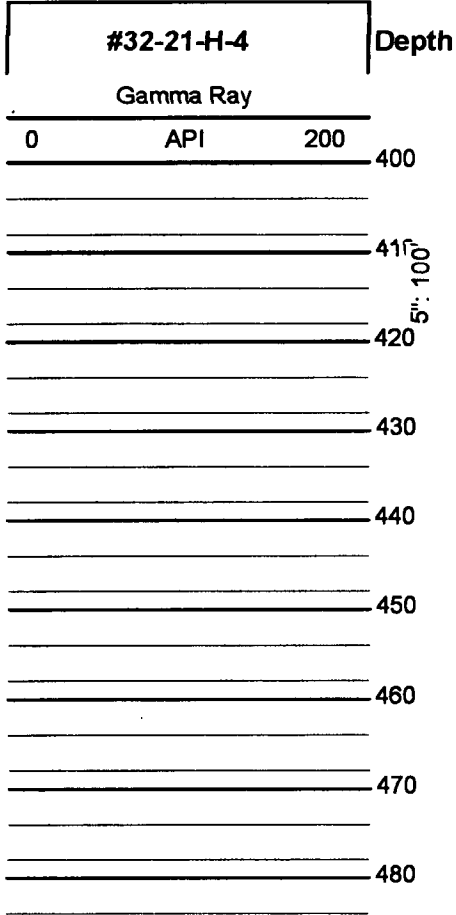
EM Tool String

Overall Length: 28.4

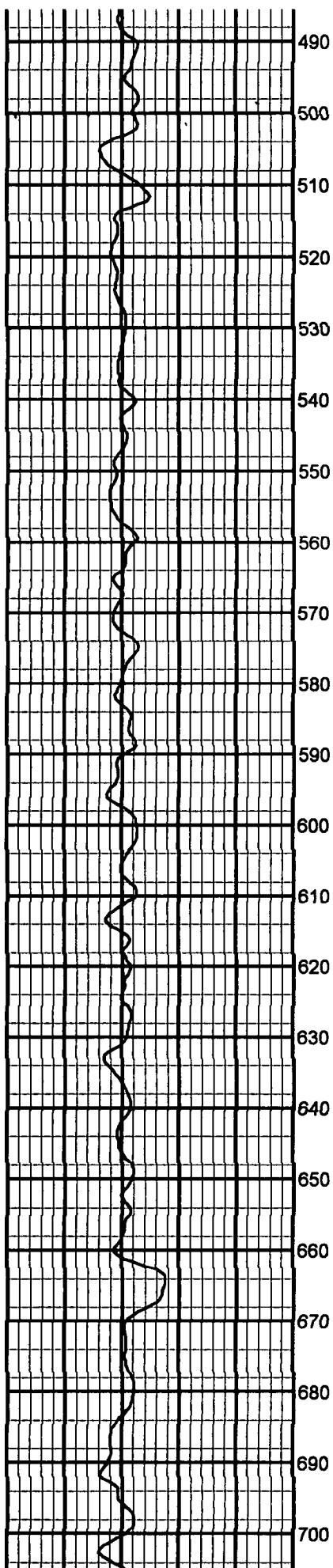
Diameter: 1 7/8

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost damages or expenses incurred or sustained by anyone resulting from an interpretation made by any of our officers, agents, or employees. These interpretations are also subject to our general terms and conditions set out in our current price schedule.

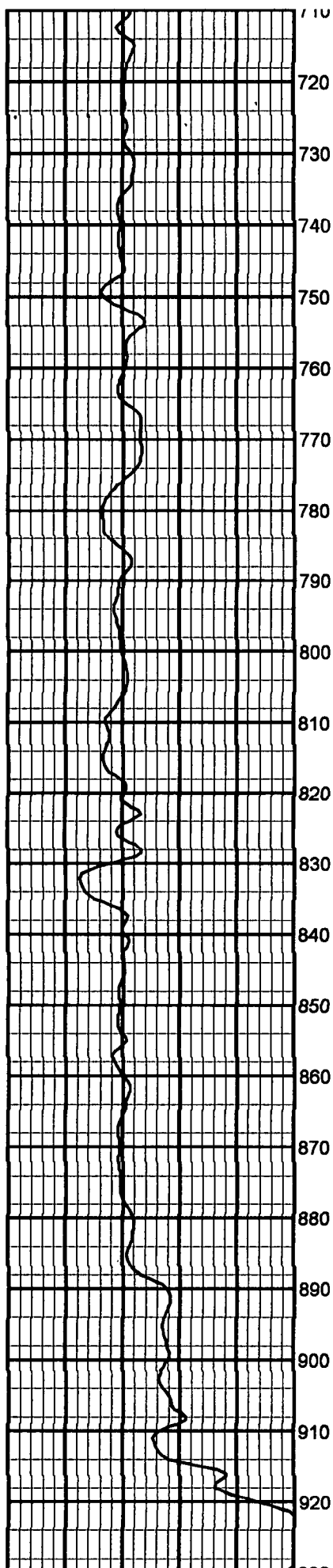
#32-21H



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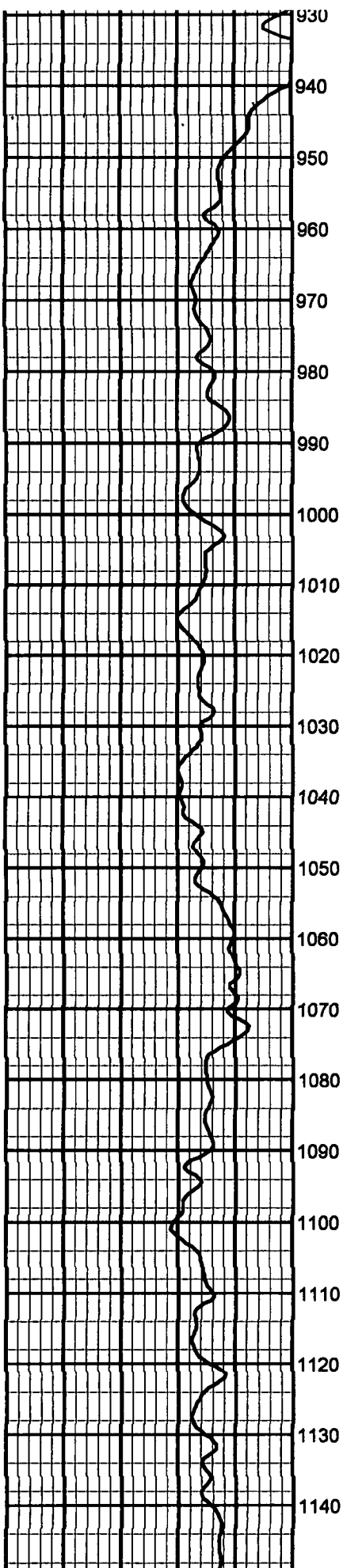
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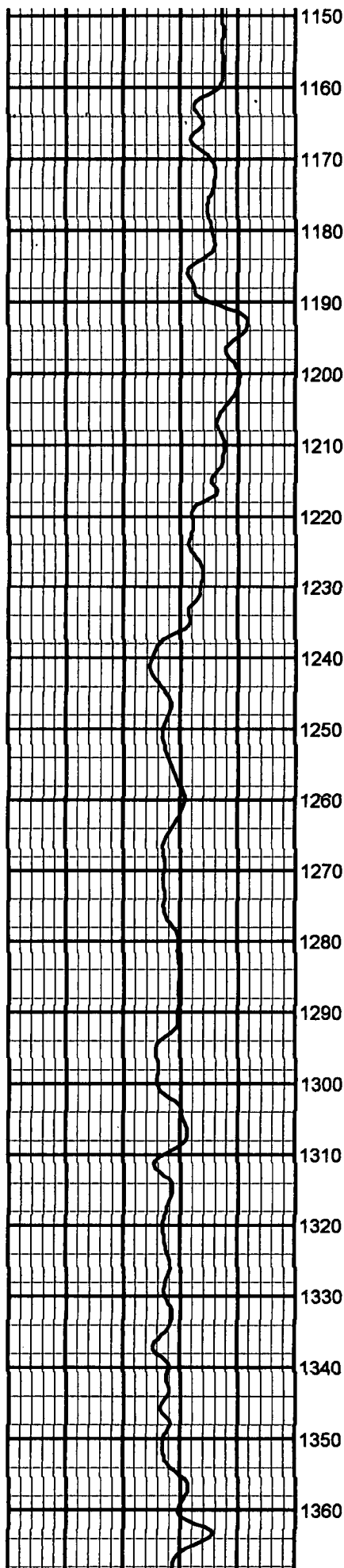
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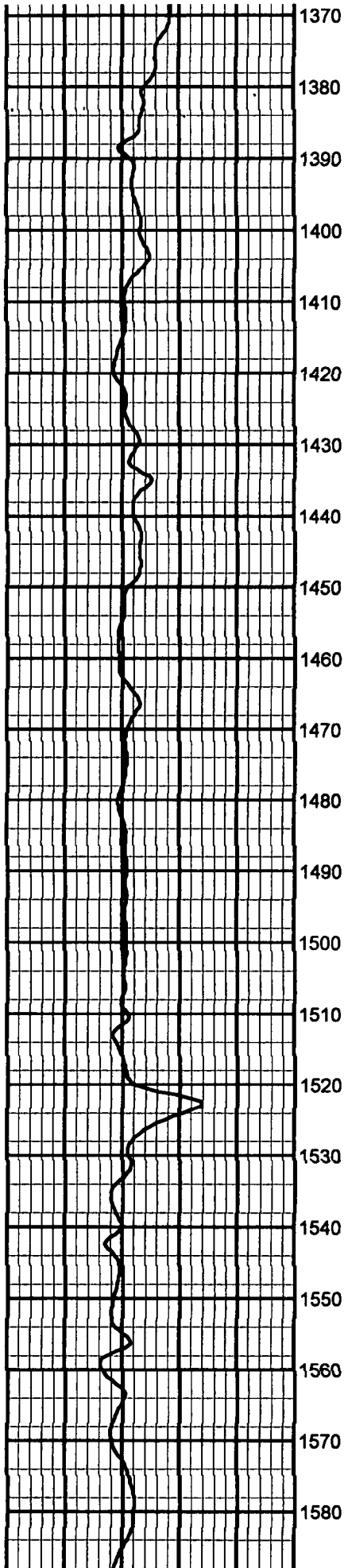
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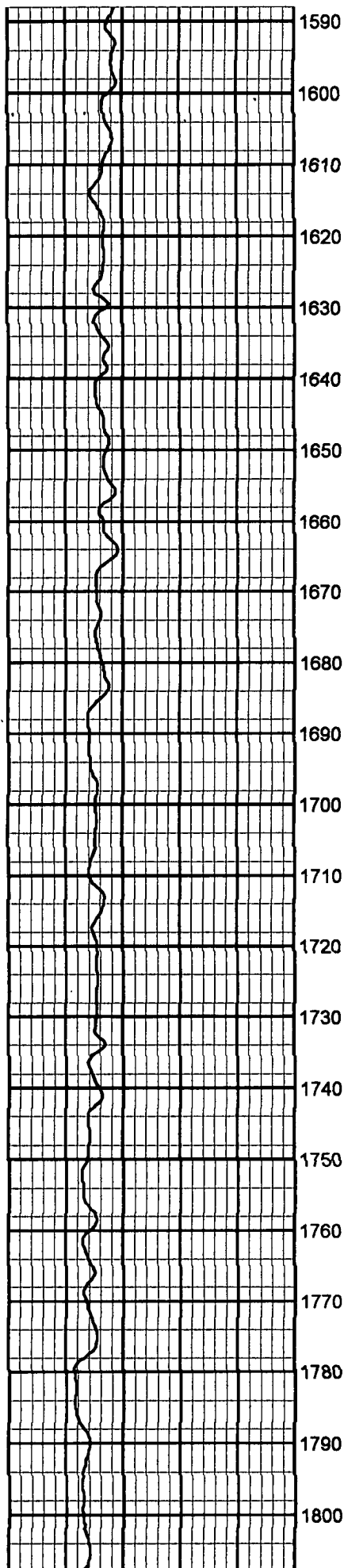
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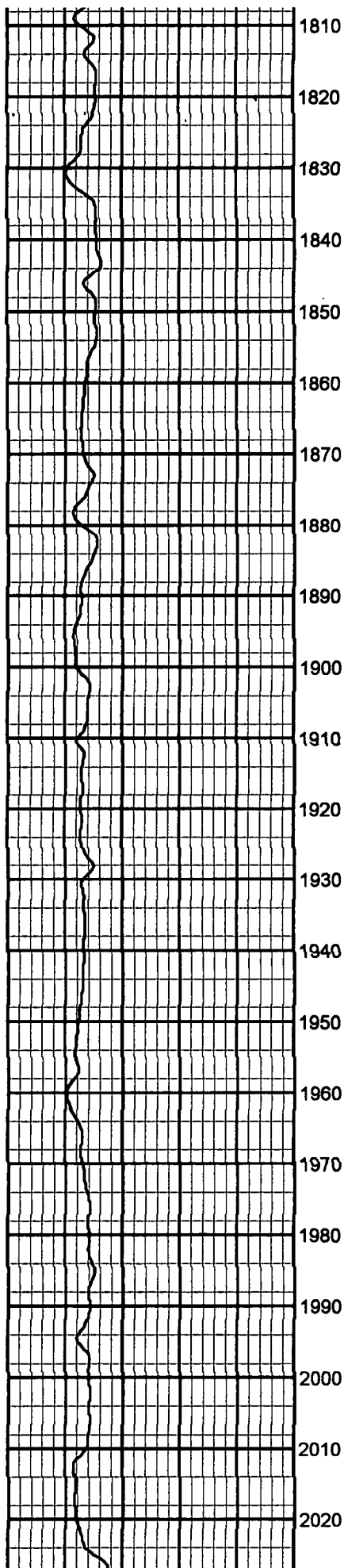
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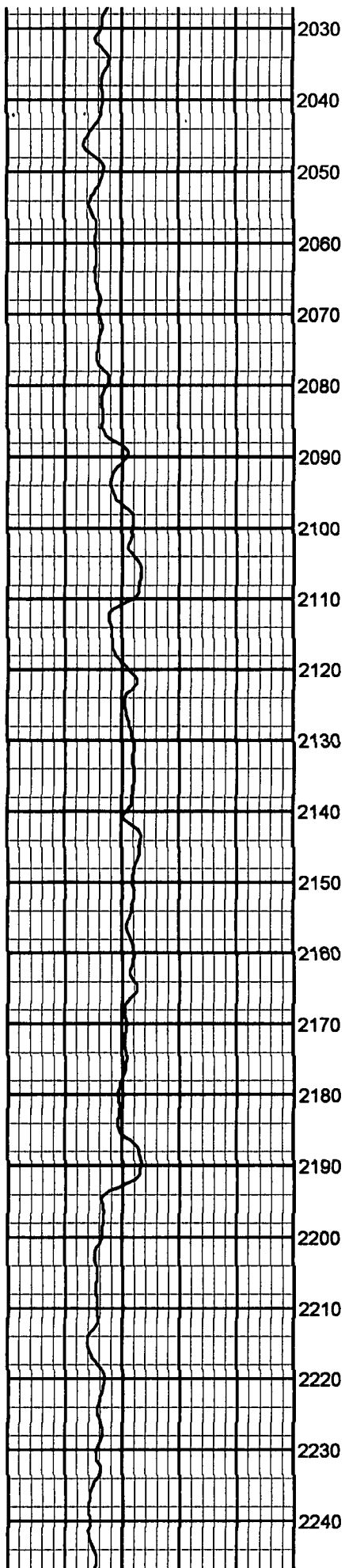
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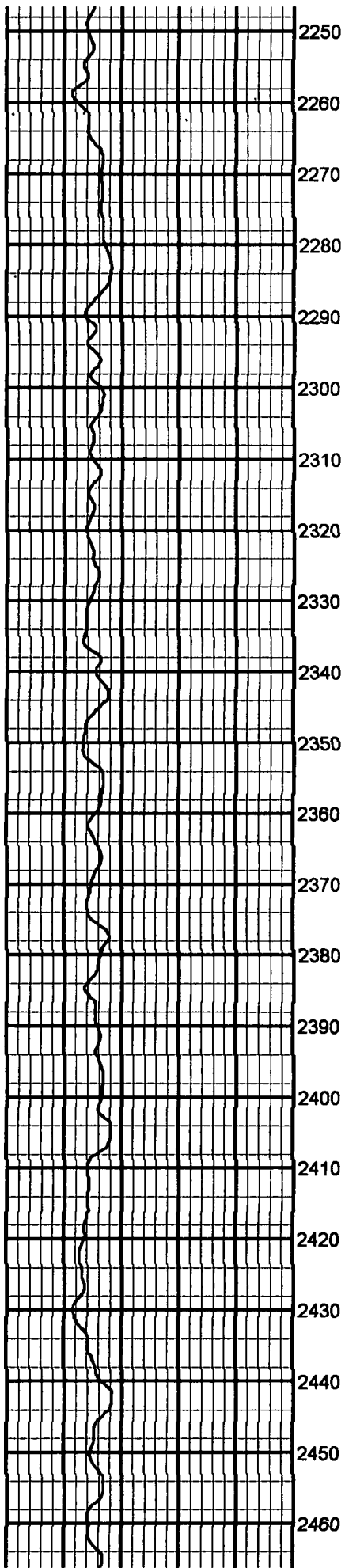
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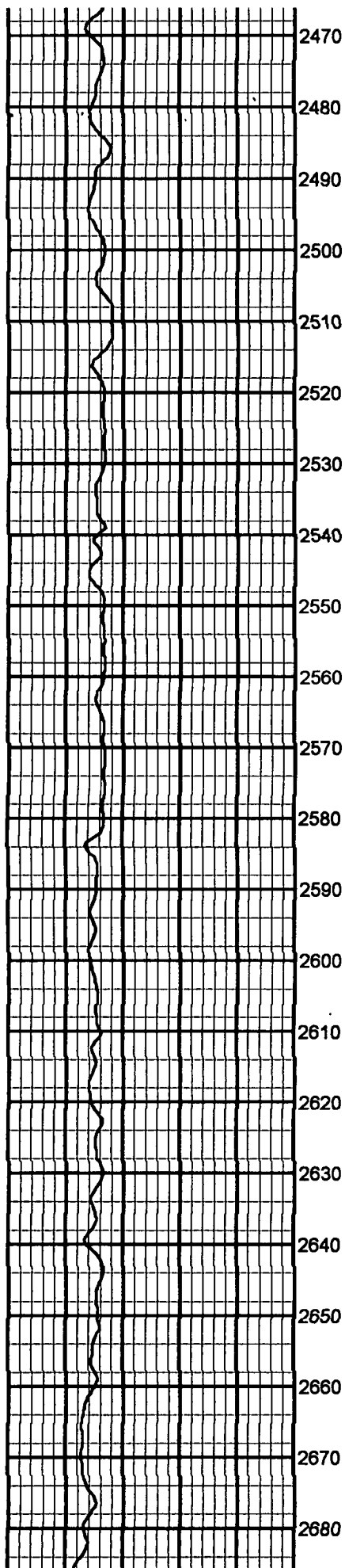
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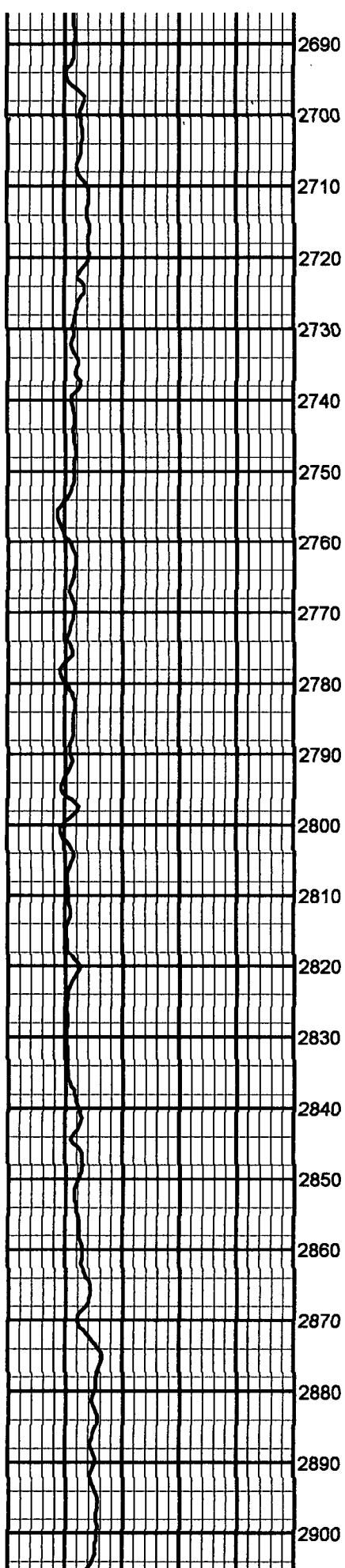
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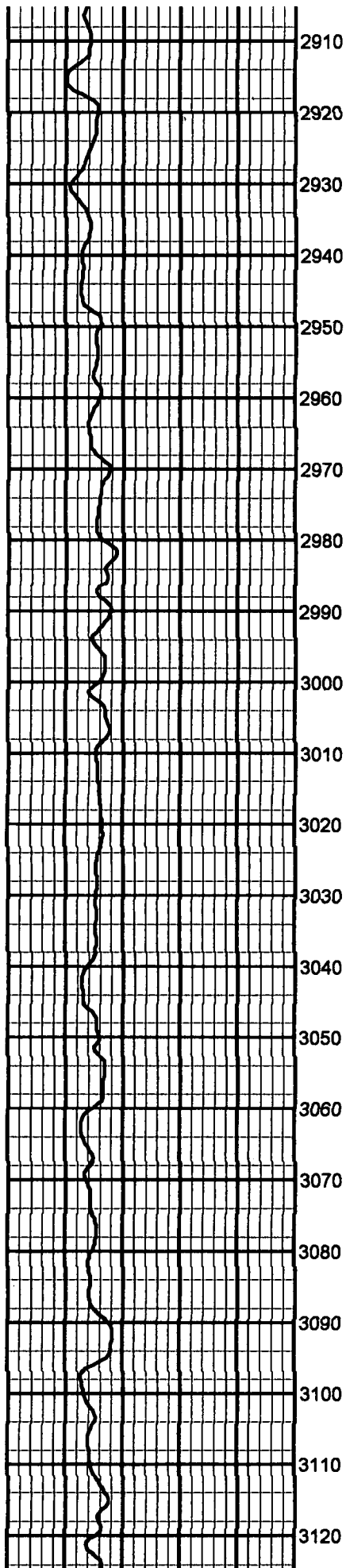
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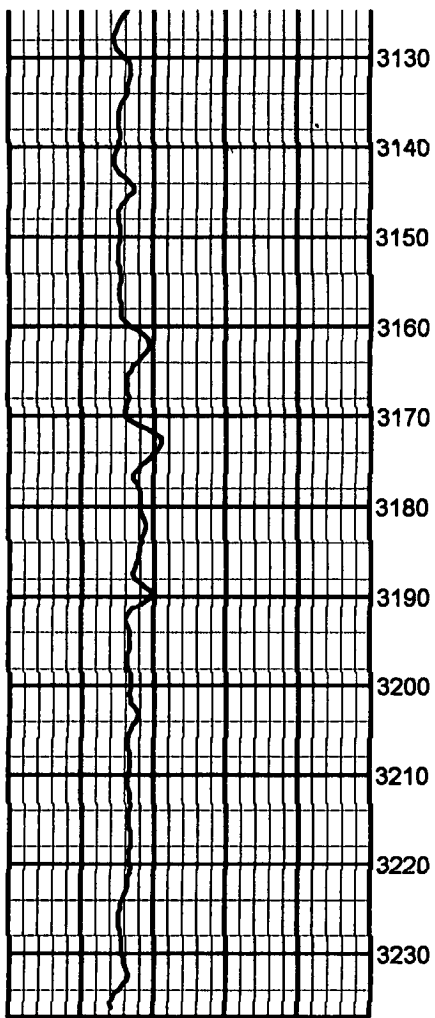
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WICHITA, KS

15-181-20461-01-00

ROSEWOOD RESOURCES INC.

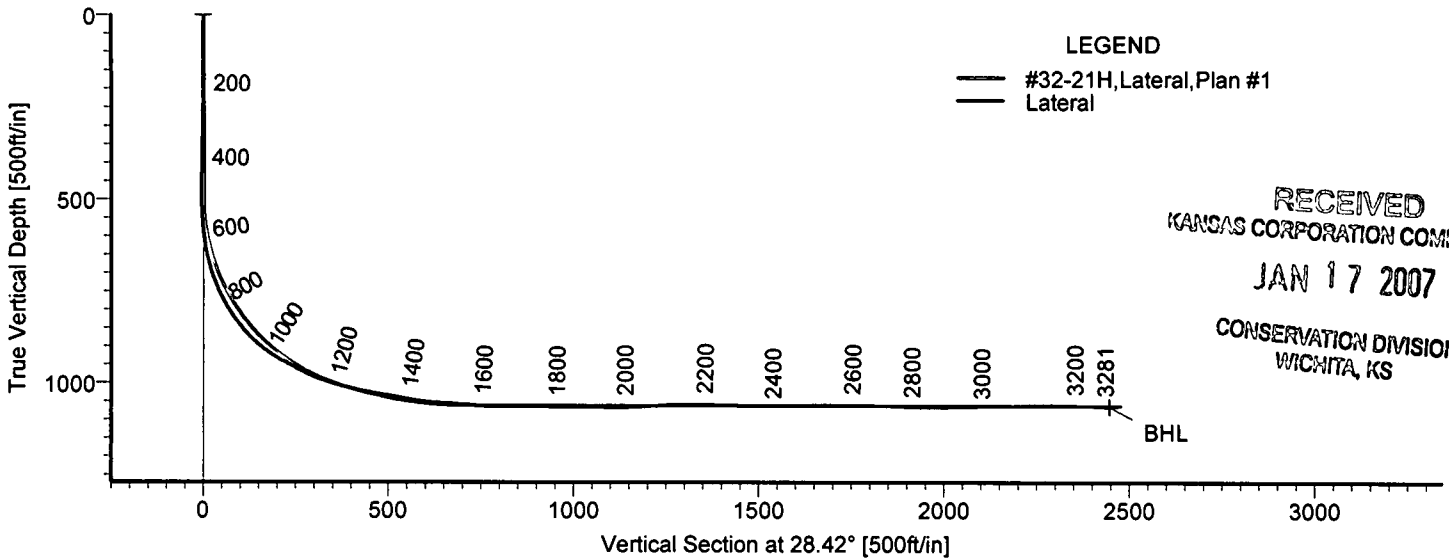
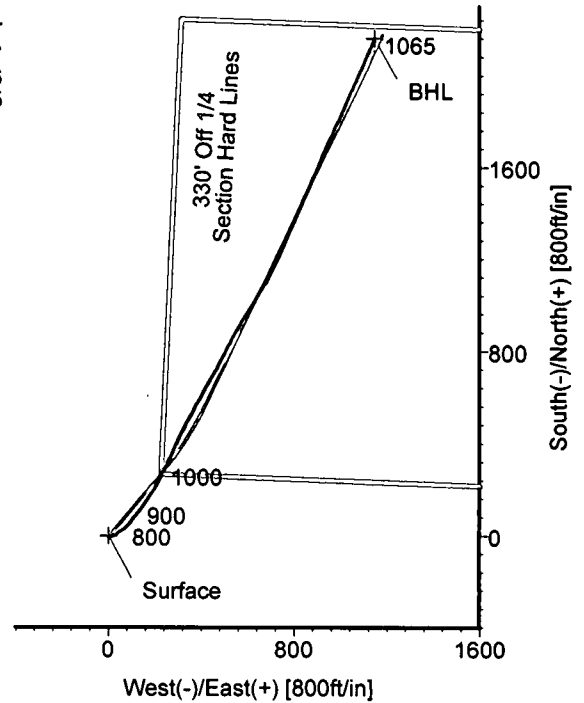
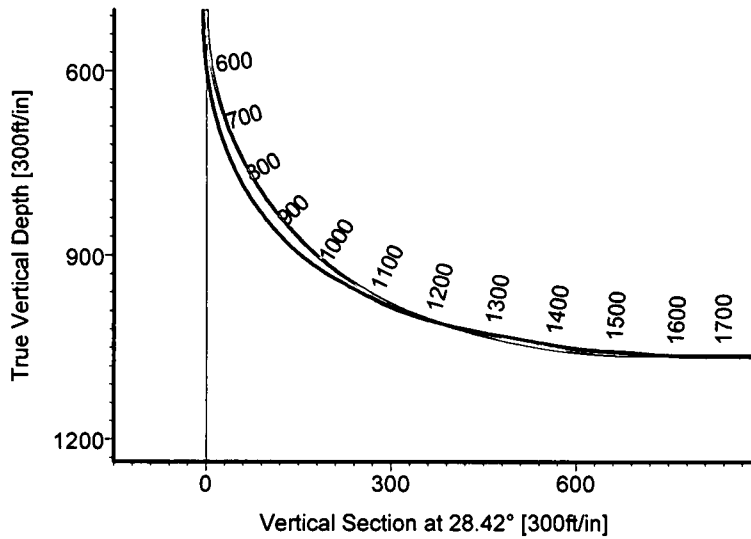


Field: Sherman County, KS
 Site: C. Ihrig 32-21H
 Well: #32-21H
 Wellpath: Lateral

Azimuths to Grid North
 True North: 2.33°
 Magnetic North: 9.98°



Magnetic Field
 Strength: 53490nT
 Dip Angle: 66.94°
 Date: 9/12/2006
 Model: igrf2005



LEGEND
 — #32-21H, Lateral, Plan #1
 — Lateral

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 WICHITA, KS

TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Shape |
|---------|---------|---------|---------|-----------|-----------|---------------|----------------|-------|
| Surface | 0.00 | 0.00 | 0.00 | 420960.60 | 961060.20 | 39°25'52.352N | 101°40'44.627W | Point |
| BHL | 1065.00 | 2161.90 | 1146.69 | 423122.50 | 962206.89 | 39°26'14.162N | 101°40'31.143W | Point |



STRATA DIRECTIONAL TECHNOLOGY, INC.
 1034 Regional Park Drive Houston, Texas 77060
 Phone: 713-934-9600 Fax: 713-934-9067

Wellpath: (#32-21H/Lateral)
 Created By: David Vogler Date: 10/4/2006
 Checked: _____ Date: _____

Strata Directional Technology, Inc.

Survey Report

| | | | |
|----------------------------------|----------------------------|-----------------------------|------------|
| Company: ROSEWOOD RESOURCES INC. | Date: 10/4/2006 | Time: 10:40:21 | Page: 1 |
| Field: Sherman County, KS | Co-ordinate(NE) Reference: | Well: #32-21H, Grid North | |
| Site: C. Ihrig 32-21H | Vertical (TVD) Reference: | 3621'GL+7'KB 3628.0 | |
| Well: #32-21H | Section (VS) Reference: | Well (0.00N,0.00E,28.42Azi) | |
| Wellpath: Lateral | Survey Calculation Method: | Minimum Curvature | Db: Adapti |

| | | |
|---|--------------------|-----------------------|
| Field: Sherman County, KS | | |
| Map System: US State Plane Coordinate System 1927 | Map Zone: | Kansas, Northern Zone |
| Geo Datum: NAD27 (Clarke 1866) | Coordinate System: | Well Centre |
| Sys Datum: Mean Sea Level | Geomagnetic Model: | igrf2005 |

| | | |
|-------------------------------|------------------------|-----------------------------|
| Site: C. Ihrig 32-21H | | |
| Site Position: | Northing: 420960.60 ft | Latitude: 39 25 52.352 N |
| From: Map | Easting: 961060.20 ft | Longitude: 101 40 44.627 W |
| Position Uncertainty: 0.00 ft | | North Reference: Grid |
| Ground Level: 3621.00 ft | | Grid Convergence: -2.33 deg |

| | | | | | |
|-------------------------------|------------------------|----------------------------|------------|--|--|
| Well: #32-21H | | | Slot Name: | | |
| Well Position: +N/-S 0.00 ft | Northing: 420960.60 ft | Latitude: 39 25 52.352 N | | | |
| +E/-W 0.00 ft | Easting: 961060.20 ft | Longitude: 101 40 44.627 W | | | |
| Position Uncertainty: 0.00 ft | | | | | |

| | | | | | |
|------------------------------------|-------------------|-------|-----------------------|----------------|--|
| Wellpath: Lateral | | | Drilled From: Surface | | |
| Current Datum: 3621'GL+7'KB | Height 3628.00 ft | | Tie-on Depth: | 0.00 ft | |
| Magnetic Data: 9/12/2006 | | | Above System Datum: | Mean Sea Level | |
| Field Strength: 53490 nT | | | Declination: | 7.65 deg | |
| Vertical Section: Depth From (TVD) | +N/-S | +E/-W | Mag Dip Angle: | 66.94 deg | |
| ft | ft | ft | Direction | deg | |
| 0.00 | 0.00 | 0.00 | | 28.42 | |

| | | | | | |
|--|---------------|-----------------------------|------------|------------|--|
| Survey Program for Definitive Wellpath | | | | | |
| Date: 9/13/2006 | Validated: No | | Version: 0 | | |
| Actual From To | To | Survey | Toolcode | Tool Name | |
| ft | ft | | | | |
| 392.00 | 3226.00 | Survey #1 (392.00-3226.00) | MWD | Std MWD | |
| 3281.00 | 3281.00 | Survey #2 (3281.00-3281.00) | Project | Projection | |

| Survey | | | | | | | | | | |
|---------|-------|--------|--------|--------|--------|--------|-----------|-----------|-----------|--------------|
| MD | Incl | Azim | TVD | +N/-S | +E/-W | VS | DLS | Build | Turn | Tool/Comment |
| ft | deg | deg | ft | ft | ft | ft | deg/100ft | deg/100ft | deg/100ft | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | TIE LINE |
| 392.00 | 1.30 | 198.00 | 391.97 | -4.23 | -1.37 | -4.37 | 0.33 | 0.33 | 0.00 | MWD |
| 424.00 | 0.90 | 228.10 | 423.96 | -4.74 | -1.67 | -4.97 | 2.15 | -1.25 | 94.06 | MWD |
| 456.00 | 1.20 | 240.10 | 455.96 | -5.08 | -2.15 | -5.49 | 1.16 | 0.94 | 37.50 | MWD |
| 488.00 | 0.40 | 89.90 | 487.95 | -5.24 | -2.33 | -5.72 | 4.87 | -2.50 | -469.37 | MWD |
| 519.00 | 3.30 | 77.90 | 518.93 | -5.06 | -1.35 | -5.09 | 9.39 | 9.35 | -38.71 | MWD |
| 551.00 | 5.70 | 79.40 | 550.83 | -4.57 | 1.11 | -3.49 | 7.51 | 7.50 | 4.69 | MWD |
| 583.00 | 8.20 | 75.70 | 582.60 | -3.72 | 4.89 | -0.94 | 7.93 | 7.81 | -11.56 | MWD |
| 613.00 | 10.60 | 68.50 | 612.19 | -2.18 | 9.53 | 2.62 | 8.89 | 8.00 | -24.00 | MWD |
| 645.00 | 14.10 | 64.90 | 643.45 | 0.56 | 15.80 | 8.01 | 11.19 | 10.94 | -11.25 | MWD |
| 677.00 | 17.50 | 61.70 | 674.23 | 4.49 | 23.57 | 15.17 | 10.96 | 10.62 | -10.00 | MWD |
| 708.00 | 21.10 | 60.40 | 703.49 | 9.46 | 32.53 | 23.80 | 11.69 | 11.61 | -4.19 | MWD |
| 740.00 | 24.50 | 57.90 | 732.98 | 15.83 | 43.16 | 34.47 | 11.05 | 10.62 | -7.81 | MWD |
| 772.00 | 27.90 | 54.90 | 761.69 | 23.67 | 54.91 | 46.95 | 11.40 | 10.62 | -9.37 | MWD |
| 803.00 | 31.60 | 49.30 | 788.61 | 33.14 | 67.01 | 61.04 | 14.92 | 11.94 | -18.06 | MWD |
| 835.00 | 35.20 | 44.50 | 815.32 | 45.19 | 79.83 | 77.74 | 13.95 | 11.25 | -15.00 | MWD |
| 867.00 | 38.30 | 38.80 | 840.97 | 59.50 | 92.52 | 96.37 | 14.39 | 9.69 | -17.81 | MWD |
| 899.00 | 42.90 | 37.10 | 865.26 | 75.93 | 105.31 | 116.90 | 14.78 | 14.37 | -5.31 | MWD |
| 931.00 | 47.60 | 36.40 | 887.78 | 94.14 | 118.90 | 139.38 | 14.77 | 14.69 | -2.19 | MWD |
| 963.00 | 52.60 | 36.50 | 908.30 | 113.88 | 133.48 | 163.68 | 15.63 | 15.62 | 0.31 | MWD |
| 995.00 | 57.40 | 36.30 | 926.65 | 134.97 | 149.03 | 189.63 | 15.01 | 15.00 | -0.62 | MWD |
| 1027.00 | 61.60 | 34.00 | 942.89 | 157.51 | 164.89 | 217.01 | 14.51 | 13.12 | -7.19 | MWD |

Strata Directional Technology, Inc.

Survey Report

Company: ROSEWOOD RESOURCES INC.
 Field: Sherman County, KS
 Site: C. Ihrig 32-21H
 Well: #32-21H
 Wellpath: Lateral

Date: 10/4/2006 Time: 10:40:21 Page: 2
 Co-ordinate(N/E) Reference: Well: #32-21H, Grid North
 Vertical (TVD) Reference: 3621'GL+7'KB 3628.0
 Section (VS) Reference: Well (0.00N,0.00E,28.42Azi)
 Survey Calculation Method: Minimum Curvature Db: Adapti

Survey

| MD ft | Incl deg | Azim deg | TVD ft | +N/-S ft | +E/-W ft | VS ft | DLS deg/100ft | Build deg/100ft | Turn deg/100ft | Tool/Comment |
|----------|-------------|-------------|-----------|-------------|-------------|----------|------------------|--------------------|-------------------|--------------|
| 1058.00 | 61.90 | 33.20 | 957.56 | 180.26 | 180.00 | 244.20 | 2.47 | 0.97 | -2.58 | MWD |
| 1090.00 | 63.00 | 31.40 | 972.36 | 204.24 | 195.16 | 272.51 | 6.06 | 3.44 | -5.62 | MWD |
| 1122.00 | 67.30 | 28.50 | 985.81 | 229.40 | 209.64 | 301.52 | 15.75 | 13.44 | -9.06 | MWD |
| 1154.00 | 71.70 | 25.70 | 997.02 | 256.07 | 223.28 | 331.48 | 16.01 | 13.75 | -8.75 | MWD |
| 1185.00 | 74.30 | 25.90 | 1006.08 | 282.76 | 236.18 | 361.09 | 8.41 | 8.39 | 0.65 | MWD |
| 1217.00 | 76.10 | 26.70 | 1014.25 | 310.50 | 249.89 | 392.00 | 6.12 | 5.62 | 2.50 | MWD |
| 1249.00 | 78.40 | 25.30 | 1021.31 | 338.55 | 263.57 | 423.18 | 8.36 | 7.19 | -4.37 | MWD |
| 1281.00 | 80.00 | 22.70 | 1027.31 | 367.26 | 276.35 | 454.52 | 9.42 | 5.00 | -8.12 | MWD |
| 1312.00 | 80.00 | 22.90 | 1032.69 | 395.40 | 288.18 | 484.90 | 0.64 | 0.00 | 0.65 | MWD |
| 1344.00 | 79.80 | 25.40 | 1038.31 | 424.15 | 301.07 | 516.32 | 7.72 | -0.62 | 7.81 | MWD |
| 1375.00 | 79.40 | 27.00 | 1043.90 | 451.50 | 314.53 | 546.78 | 5.24 | -1.29 | 5.16 | MWD |
| 1407.00 | 81.50 | 27.40 | 1049.21 | 479.57 | 328.95 | 578.33 | 6.68 | 6.56 | 1.25 | MWD |
| 1439.00 | 84.90 | 28.60 | 1053.00 | 507.62 | 343.87 | 610.10 | 11.26 | 10.62 | 3.75 | MWD |
| 1471.00 | 86.40 | 28.50 | 1055.43 | 535.65 | 359.12 | 642.01 | 4.70 | 4.69 | -0.31 | MWD |
| 1503.00 | 86.30 | 28.40 | 1057.47 | 563.72 | 374.33 | 673.94 | 0.44 | -0.31 | -0.31 | MWD |
| 1534.00 | 85.70 | 28.40 | 1059.63 | 590.93 | 389.04 | 704.87 | 1.94 | -1.94 | 0.00 | MWD |
| 1566.00 | 85.70 | 28.20 | 1062.03 | 619.02 | 404.17 | 736.78 | 0.62 | 0.00 | -0.62 | MWD |
| 1598.00 | 87.10 | 29.10 | 1064.04 | 647.05 | 419.48 | 768.71 | 5.20 | 4.37 | 2.81 | MWD |
| 1629.00 | 89.80 | 29.30 | 1064.87 | 674.10 | 434.59 | 799.69 | 8.73 | 8.71 | 0.65 | MWD |
| 1661.00 | 90.50 | 29.30 | 1064.79 | 702.00 | 450.25 | 831.69 | 2.19 | 2.19 | 0.00 | MWD |
| 1757.00 | 89.30 | 27.00 | 1064.96 | 786.64 | 495.54 | 927.68 | 2.70 | -1.25 | -2.40 | MWD |
| 1788.00 | 89.00 | 27.60 | 1065.42 | 814.18 | 509.76 | 958.67 | 2.16 | -0.97 | 1.94 | MWD |
| 1820.00 | 89.30 | 28.40 | 1065.89 | 842.44 | 524.78 | 990.67 | 2.67 | 0.94 | 2.50 | MWD |
| 1851.00 | 90.00 | 29.10 | 1066.08 | 869.61 | 539.69 | 1021.66 | 3.19 | 2.26 | 2.26 | MWD |
| 1883.00 | 89.60 | 29.10 | 1066.19 | 897.57 | 555.25 | 1053.66 | 1.25 | -1.25 | 0.00 | MWD |
| 1915.00 | 88.50 | 30.60 | 1066.72 | 925.32 | 571.18 | 1085.65 | 5.81 | -3.44 | 4.69 | MWD |
| 1947.00 | 90.20 | 31.30 | 1067.09 | 952.76 | 587.63 | 1117.61 | 5.75 | 5.31 | 2.19 | MWD |
| 1979.00 | 91.70 | 31.30 | 1066.56 | 980.10 | 604.25 | 1149.57 | 4.69 | 4.69 | 0.00 | MWD |
| 2011.00 | 93.50 | 31.80 | 1065.11 | 1007.34 | 620.98 | 1181.48 | 5.84 | 5.62 | 1.56 | MWD |
| 2043.00 | 94.10 | 31.70 | 1062.99 | 1034.49 | 637.78 | 1213.36 | 1.90 | 1.87 | -0.31 | MWD |
| 2074.00 | 94.30 | 30.70 | 1060.71 | 1060.94 | 653.80 | 1244.24 | 3.28 | 0.65 | -3.23 | MWD |
| 2106.00 | 91.80 | 29.20 | 1059.01 | 1088.62 | 669.75 | 1276.18 | 9.11 | -7.81 | -4.69 | MWD |
| 2138.00 | 89.20 | 27.20 | 1058.73 | 1116.82 | 684.87 | 1308.17 | 10.25 | -8.12 | -6.25 | MWD |
| 2170.00 | 88.90 | 26.30 | 1059.26 | 1145.39 | 699.27 | 1340.16 | 2.96 | -0.94 | -2.81 | MWD |
| 2202.00 | 88.90 | 26.30 | 1059.88 | 1174.07 | 713.44 | 1372.13 | 0.00 | 0.00 | 0.00 | MWD |
| 2234.00 | 88.50 | 25.80 | 1060.60 | 1202.82 | 727.49 | 1404.09 | 2.00 | -1.25 | -1.56 | MWD |
| 2266.00 | 88.20 | 24.00 | 1061.53 | 1231.83 | 740.96 | 1436.02 | 5.70 | -0.94 | -5.62 | MWD |
| 2298.00 | 88.40 | 23.30 | 1062.47 | 1261.13 | 753.79 | 1467.89 | 2.27 | 0.62 | -2.19 | MWD |
| 2329.00 | 90.00 | 23.00 | 1062.91 | 1289.63 | 765.98 | 1498.76 | 5.25 | 5.16 | -0.97 | MWD |
| 2425.00 | 90.70 | 23.60 | 1062.32 | 1377.79 | 803.95 | 1594.37 | 0.96 | 0.73 | 0.62 | MWD |
| 2521.00 | 91.40 | 22.70 | 1060.56 | 1466.05 | 841.68 | 1689.95 | 1.19 | 0.73 | -0.94 | MWD |
| 2616.00 | 88.20 | 23.10 | 1060.89 | 1553.55 | 878.64 | 1784.49 | 3.39 | -3.37 | 0.42 | MWD |
| 2712.00 | 87.60 | 23.00 | 1064.41 | 1641.83 | 916.21 | 1880.01 | 0.63 | -0.62 | -0.10 | MWD |
| 2807.00 | 90.90 | 24.80 | 1065.65 | 1728.66 | 954.69 | 1974.69 | 3.96 | 3.47 | 1.89 | MWD |
| 2902.00 | 91.20 | 24.10 | 1063.91 | 1815.12 | 994.00 | 2069.44 | 0.80 | 0.32 | -0.74 | MWD |
| 2998.00 | 90.70 | 24.10 | 1062.32 | 1902.74 | 1033.19 | 2165.16 | 0.52 | -0.52 | 0.00 | MWD |
| 3094.00 | 90.90 | 23.60 | 1060.98 | 1990.53 | 1072.01 | 2260.84 | 0.56 | 0.21 | -0.52 | MWD |
| 3189.00 | 88.20 | 23.90 | 1061.73 | 2077.48 | 1110.26 | 2355.51 | 2.86 | -2.84 | 0.32 | MWD |
| 3226.00 | 87.90 | 23.20 | 1062.99 | 2111.38 | 1125.04 | 2392.36 | 2.06 | -0.81 | -1.89 | MWD |
| 3281.00 | 87.90 | 23.20 | 1065.00 | 2161.90 | 1146.69 | 2447.09 | 0.00 | 0.00 | 0.00 | Project |