

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**5. Lease Serial No.  
NMNM16835

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
CHEVRON USA INCORPORATEDContact: DENISE PINKERTON  
E-Mail: LEAKEJD@CHEVRON.COM8. Well Name and No.  
NEUHAUS 14 FED 049. API Well No.  
30-025-36353-00-S13a. Address  
15 SMITH ROAD  
MIDLAND, TX 797053b. Phone No. (include area code)  
Ph: 432-687-7375  
Fx: 432-687-722110. Field and Pool, or Exploratory  
FEATHERSTONE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 14 T20S R35E SWNE 1980FNL 1650FEL  
32.575005 N Lat, 103.424723 W Lon

11. County or Parish, and State

LEA COUNTY, NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

THIS WELL HAS RECENTLY BEEN RECOMPLETED IN THE SAME ZONE BY ADDING PERFS TO THE FEATHERSTONE/BONESPRING ZONE.

11/4/2015

MIRU GREEN'S ENERGY EQPT. N/U TREE SAVER TO BOP. R/U CHART TEST EQPT TO TREE SAVER TO CHART CSG TEST.

N/D WH CAP. INSTALL CSG HANGER W/ 2-WAY CHECK AND N/U CLASS II-R2 7-1/16" BOP

R/U WSI CHART TESTER, CHART TEST CLASS II-R2 7-1/16" BOP W/ PIPE OVER BLIND RAMS TO 250L/1000H FOR 15 MINS. GOOD TESTS

REMOVE 2-WAY CHECK, R/D WSI CHART TESTER.

MIRU GREEN'S ENERGY EQPT. N/U TREE SAVER TO BOP. CHART CSG TEST.

TEST CBP/CSG FROM 9700' TO SRUF THROUGH TREE SAVER TO 350L. NO LEAKS PRIOR TO HIGH TEST. 350L

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #328111 verified by the BLM Well Information System

For CHEVRON USA INCORPORATED, sent to the Hobbs

Committed to AFMSS for processing by DEBORAH MCKINNEY on 01/12/2016 (04DG0038S)

Name (Printed/Typed) MICHAEL STAFFORD

Title PETROLEUM ENGINEER

Signature (Electronic Submission)

Date 01/08/2016

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTED

(BLM Approver Not Specified)

Title

Date 02/16/2016

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Kz

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

MAR 04 2016

jm



**Additional data for EC transaction #328111 that would not fit on the form**

**32. Additional remarks, continued**

TESTED GOOD, TEST CSG TO 5000H/30 MINS. GOOD TEST. RDMO GREENS TREE SAVER EQPT. N/U ENVIRO PAN. SIFN

11/5/2016

CSG: 0 PSI. STRAP TBG, P/U AND TIH W/ 4-3/4" MTB, SIX - 3-1/2" DCs ON 2-7/8" L-80 WS TO CBP TOC @ ~9700'.

TIH W/ 4-3/4" MTB, 6 - 3-1/2" DCs ON 2-7/8" L-80 WS TO ~9700'.

TAGGED TOC @ 9692' ON 294 JTS 2-7/8" WS. SIFN.

11/6/2015

CSG: 0 PSI. RU POWER SWIVEL, STRIPPER HEAD. EST CIRC W/ 8.6 PPG BRINE @ 2.5 BPM. MILL OUT CMT/CBP FROM 9692' TO ~9740'. RPM: 60, TORQUE: 1500 PSI, WOB: 6 PTS. RD POWER SWIVEL. TIH ON 2-7/8" L-80 WS F/9740' TO PBTD @ 10,180'. TAGGED FILL @ 10135' W/ 307 JTS 2-7/8" L-80 WS. PRESS W/ACID SPOT AND CLEAN WELL TO PBTD POST FRAC. TOH L/D 4 JTS 2-7/8" L-80 WS F/10135' T/9995'. RECONFIGURE FLOW LINES FOR ACID SPOT. SIFN.

11/7/2015

SPOT 575 GALS (13.7 BBLS) 10% ACETIC ACID FROM EOT @ 9995' T/9470' OVER PROPOSED PERF ZONE F/9986' T/9593'. PRESS TEST LINES TO 2000 PSI. GOOD TEST.

ESTB CIRC W/ 9 BBLS 8.6 PPG BRINE @ 2.5 BPM. PUMPED 13.7 BBLS 10% ACETIC ACID/WATER @ 2.3 BPM AND 582 PSI. DISPLACED TBG W/ 58 BBLS 8.6 PPG BRINE @ 845 PSI TO EOT, PLACING SPOT F/9995' T/9470'.

RDMO PUMP TRUCK.

PRIOR TO START OF TOH, CHECKED TBG PRESSURE @ 0830. 180 PSI ON TBG. LEAVE TBG PRESSURE SHUT IN X 1 HOUR, RECHECK. WELL SHUT IN F/0830 HRS T/0930 HRS W/ 180 PSI TBG PRESSURE.

RECHECKED @ 0930 HRS - TBG PRESSURE FELL 60 POUNDS T/120 PSI. DECIDED TO WAIT TILL 1030 HRS AND RECHECK TBG PRESSURE.

RECHECK @ 1030 HRS - TBG PRESSURE FELL TO 90 PSI. DECISION MADE TO FLOW BACK REMAINING PRESS.

FLOWED BACK ~6 BBLS @ 90 PSI DOWN TO 0 PSI IN 30 MINS. OBSERVED WELL FOR 30 MINS TO VERIFY WELL DEAD.

TOH F/9995' T/~1600' L/D 261 JTS 2-7/8" L-80 WS TO RACKS. LEFT 42 JTS WS IN HOLE AS KILL STRING.

SIFN.

SEE REMAINDER OF PROCEDURE ATTACHED.





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Report Start Date: 11/3/2015

Com

ROAD RIG/EQPT FROM TALCO 25-35-35 TO NEUHAUS 14 FED 004.

REVIEW JSA AND SPOT IN BLOW DOWN TANK, REVERSE PUMP AND PIT EQPT.

CREW TRAVEL FROM WELL SITE

NO ACTIVITY AT WELL SITE.

Report Start Date: 11/4/2015

Com

NO ACTIVITY AT WELL SITE

JSA REVIEW W/ KEY, SMITH, WSI, GREEN, AND D&L FOR N/D WH, N/U AND TEST BOPE AND N/U TREE SAVER AND TEST CSG.

CREW TRAVEL TO LOCATION

PTSM AND JSA REVIEW WITH KEY, SMITH, FORKLIFT ENTERPRISE, AND WSI FOR R/U PULLING UNIT, FINISH SPOTTING EQUIPMENT, AND PROJECTED OPS

CHECK WELL PRESSURES - CSG: 0 PSI  
RIG UP WO RIG AND ASSOCIATED EQUIPMENT.

N/D WH CAP, INSTALL CSG HANGER W/ 2-WAY CHECK AND N/U CLASS II-R2 7-1/16" BOP TO WELL HEAD.

R/U WSI CHART TEST EQPT AND CHART TEST CLASS II-R2 7-1/16" BOP W/ PIPE OVER BLIND RAMS TO 250L/1000H FOR 15 MINS. GOOD TESTS

REMOVE 2-WAY CHECK, R/D WSI CHART TESTER EQPT, AND CLEAR WH AREA.

MIRU GREEN'S ENERGY EQPT. N/U TREE SAVER TO BOP. R/U CHART TEST EQPT TO TREE SAVER TO CHART CSG TEST.

TEST CBP/CSG FROM 9700' TO SRUF THROUGH TREE SAVER TO 350L

\*\*\*\*VERIFY NOT LEAKS BEFORE PROCEEDING TO HIGH TEST.

350L TESTED GOOD,

TEST CSG TO 5000H/30 MINS. GOOD TEST

RDMO GREENS TREE SAVER EQPT.

N/U ENVIRO PAN AND SECURE SITE

CLOSE BLIND RAMS, SIFN

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE

Report Start Date: 11/5/2015

Com

NO ACTIVITY AT WELL SITE

CREW TRAVEL TO LOCATION

PTSM AND JSA REVIEW WITH KEY AND SMITH FOR TIH, MILLING OPS, AND PROJECTED OPS

CHECK WELL PRESSURES - CSG: 0 PSI

RIG UP WO RIG WORK FLOOR.

CALIPER/INSPECT ELEVATORS.

STRAP TBG, P/U AND TIH W/ 4-3/4" MTB, SIX - 3-1/2" DCs ON 2-7/8" L-80 WS TO CBP TOC @ ~9700'.

BHA CONSISTS OF:

1 - 4-3/4" MTB X .45'

1 - 2-7/8" BOX X 2-3/8" BOX (3-3/4" OD X 2" ID) CROSS OVER X 1.5'

1 - DRILL COLLAR (3-1/2" OD X 1-1/2" ID) X 30.41'

1 - DRILL COLLAR (3-1/2" OD X 1-1/2" ID) X 31.39'

1 - DRILL COLLAR (3-1/2" OD X 1-9/16" ID) X 30.19'

1 - DRILL COLLAR (3-7/16" OD X 1-1/2" ID) X 31.69'

1 - DRILL COLLAR (3-7/16" OD X 1-9/16" ID) X 30.78'

1 - DRILL COLLAR (3-7/16" OD X 1-9/16" ID) X 30.09'

1 - 2-3/8" IF PIN X 2-7/8" EUE BOX (3-5/8" OD X 1-9/16" ID) X 1.25'

TOTAL LENGTH OF BHA: 187.75'

CREW LUNCH

CONTINUE TIH W/ 4-3/4" MTB, 6 - 3-1/2" DCs ON 2-7/8" L-80 WS TO ~9700'.

TAGGED TOC @ 9692' ON 294 JTS 2-7/8" WS.

SWA FOR HIGH WINDS - SI WELL AND CLEAR WORK FLOOR.

RIG DRILLS DUE. DISCUSSED RIG DRILLS W/ CREW/REVERSE UNIT OPTR FOR FIRE, MAN DOWN, H2S, EVECUTION, SPILL, BOP, AND HIGH ANGLE RESCUE.

SWA FOR HIGH WINDS, BLOWING 25, GUSTING TO 35 MPH.

CREW TRAVEL FROM LOCATION





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

NO ACTIVITY AT WELL SITE

Report Start Date: 11/6/2015

Com

NO ACTIVITY AT WELL SITE

CREW TRAVEL TO LOCATION

\*\*\*\*\*NOTE\*\*\*\*\*CREW ARRIVAL TO LOCATION DELAYED DUE TO KEY ENERGY MANDATORY CREW URINALYSIS TESTING.

PTSM AND JSA REVIEW WITH KEY AND SMITH FOR TIH, MILLING OPS, AND DISCUSSED PROJECTED OPS FOR ACID SPOT.

CHECK WELL PRESSURES - CSG: 0 PSI

RIG UP POWER SWIVEL AND STRIPPER HEAD.

\*\*\*\*\*NOTE\*\*\*\*\*CREW CONDUCTED MINOR MAINTENANCE/LUBE ON POWER TONGS BEFORE MILLING OPS.

EST CIRC W/ 8.6 PPG BRINE @ 2.5 BPM.

MILL OUT CMT/CBP FROM 9692' TO ~9740'

RPM: 60, TORQUE: 1500 PSI, WOB: 6 PTS.

CREW LUNCH

RIG DOWN POWER SWIVEL.

TIH ON 2-7/8" L-80 WS F/9740' TO PBTD @ 10,180'

TAGGED FILL @ 10135' W/ 307 JTS 2-7/8" L-80 WS. CONSULTED W/E. ADVISED TO PRESS W/ ACID SPOT AND CLEAN WELL TO PBTD POST FRAC.

TOH L/D 4 JTS 2-7/8" L-80 WS F/10135' T/9995'.

R/D STRIPPER HEAD AND RECONFIGURE FLOW LINES FOR ACID SPOT.

PRIOR TO ACID SPOT JOB, SWA FOR NO SHOWER TRAILER ON SITE FOR ACID SPOT AND NOT ENOUGH TIME TO GET ONE TO LOCATION BEFORE DARK. SECURED WELL, PUSHED ACID SPOT TO MORNING SO SHOWER TRAILER WILL BE AVAILABLE, AND RELEASED CREW.

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 11/7/2015

Com

NO ACTIVITY AT WELL SITE

CREW TRAVEL TO LOCATION

PTSM AND JSA REVIEW WITH KEY, SMITH, AND PETROPLEX FOR ACID SPOT AND PROJECTED OPS OF TOH L/D 2-7/8" L-80 WS TO RACKS. CHECK WELL PRESSURES - CSG: 0 PSI TBG: 0 PSI - WELL ON VACUUM.

MIRU PETROPLEX PUMP TRUCK, SHOWER TRAILER, AND TREATER VAN. VERIFIED SHOWER TRAILER FUNCTION PRIOR TO START OF JOB.

SPOT 575 GALS (13.7 BBLS) 10% ACETIC ACID FROM EOT @ 9995' T/9470' OVER PROPOSED PERF ZONE F/9986' T/9593'.

PRESS TEST LINES TO 2000 PSI. GOOD TEST.

ESTB CIRC W/ 9 BBLS 8.6 PPG BRINE @ 2.5 BPM.

PUMPED 13.7 BBLS 10% ACETIC ACID/WATER @ 2.3 BPM AND 582 PSI.

DISPLACED TBG W/ 58 BBLS 8.6 PPG BRINE @ 845 PSI TO EOT, PLACING SPOT F/9995' T/9470'.

RDMO PETROPLEX PUMP TRUCK, TREATER VAN, AND SHOWER TRAILER.

\*\*\*\*\*NOTE\*\*\*\*\*PRIOR TO START OF TOH, CHECKED TBG PRESSURE @ 0830. 180 PSI ON TBG. CONSULTED W/E, ADVISED TO LEAVE TBG PRESSURE SHUT IN FOR AN HOUR AND RECHECK. WELL SHUT IN F/0830 HRS T/0930 HRS W/ 180 PSI TBG PRESSURE.

RECHECKED @ 0930 HRS - TBG PRESSURE FELL 60 POUNDS T/120 PSI. DECIDED TO WAIT TILL 1030 HRS AND RECHECK TBG PRESSURE.

RECHECK @ 1030 HRS - TBG PRESSURE FELL TO 90 PSI. DECISION MADE TO FLOW BACK REMAINING PRESS.

FLOWED BACK ~6 BBLS @ 90 PSI DOWN TO 0 PSI IN 30 MINS. OBSERVED WELL FOR 30 MINS TO VERIFY WELL DEAD.

TOH F/9995' T/~1600' L/D 261 JTS 2-7/8" L-80 WS TO RACKS. LEFT 42 JTS WS IN HOLE AS KILL STRING.

SECURE EQPT/RIG TOOLS, CLEAN RIG FLOOR, INSTALL TIW, CLOSE AND LOCK PIPE RAMS.

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 11/8/2015

Com

NO ACTIVITY AT THE WELL SITE

Report Start Date: 11/9/2015

Com

NO ACTIVITY AT WELL SITE

CREW TRAVEL TO LOCATION





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS `14` FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

PTSM AND JSA REVIEW WITH KEY AND SMITH FOR TOH L/D 2-7/8" L-80 WS TO RACKS. N/D BOP, N/U AND TEST FRAC VALVE, RDMO WO RIG AND ASSOCIATED EQPT.

CHECK WELL PRESSURES - CSG: 0 PSI TBG: 0 PSI - WELL ON VACUUM.

TOH L/D 61 JTS 2-7/8" L-80 WS TO RACKS.

JSA REVIEW W/ KEY, SMITH, D&L, GUARDIAN, AND WSI FOR N/D BOPE, N/U AND TEST FRAC VALVE AND INSTALL NIGHT CAP.

INSTALL HANGER W/ 2-WAY CHECK IN WH AND N/D BOPE.

INSTALL 7-1/16" 5M FRAV VALVE AND CHART TEST EQPT.

TEST FRAC VALVE FLANGE T/250L/500H FOR 5 MINS - GOOD TEST.

REMOVE HANGER W/ 2-WAY CHECK, CLOSE FRAC VALVE AND INSTALL NIGHT CAP.

CREW LUNCH

RDMO WO RIG AND ASSOC EQPT AND MOVE TO CDU-103.

NO ACTIVITY AT WELL SITE

**Report Start Date:** 11/10/2015

Com

NO OPS ON LOCATION.

TGSM, JSA REVIEW

WELL WAS ON A VACCUM. ARCHER WL MIRU. TEST LUBRICATOR 250/1000 PSI. GOOD TEST. RIH WITH GR/CCL AND FIRST GUNS. ( 3 1/8" SLICK GUNS W/ 19 GRM CHARG, .5 EHD, 41.17" PEN, 4 SPF 90 DEGREE PHASING.) LOG FROM 10,118' UP TO 8500' TIED BACK TO APOLLO CBL/GR/CCL LOG DATED 9/16/03. PERFORATE 9952' - 86'. 2nd RUN SHOT 9893' - 9948'. 3rd RUN SHOT 9790' - 9820'. 4th RUN SHOT 9593' - 9776'. ALL SHOT FIRED. ARCHER WL RD MO.

NO OPS ON LOCATION.

**Report Start Date:** 11/11/2015

Com

WAIT ON FRAC

**Report Start Date:** 11/12/2015

Com

NO ACTIVITY AT WELL SITE

MIRU CUDD AND ARCHER EQ

**Report Start Date:** 11/13/2015

Com

PRE JOB SAFETY MEETING

CHECK ALL PERSONAL FOR COMPLIANCE

PRESSURE TEST LINES TO 5952 PSI, SET POP OFFS @ 5100 PSI.





# Summary Report

Major Rig Work Over (MRWO)  
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Com

STG 1 FRAC: TOP PERF 9592' BTM PERF 9986'

LOAD HOLE W/ 50 BBLS OF SLICK WATER  
EST RATE

BREAKDOWN: 2248 PSI

START 20% HCL ACID: 12 BBL, 12 BBL/MIN

START 48 BBLS OF 20% HCL ACID W/ 640 BIO BALLS.

START 240 BBLS OF SLICK WATER FLUSH

SHUT DOWN/SURGE BALLS OFF  
LET BALLS SETTLE FOR 30 MINS

RESUME STAGE

START 240 BBLS OF SLICK WATER (PREPAD) @ 41 BBLS/MIN @ 4177 PSI

START 141 BBL .50PPG 100 MESH @ 48 BBLS/MIN @ 4226 PSI

START 525 BBL PAD BFRAC 15 @ 54 BBLS/MIN @ 3961 PSI

START 137 BBL .50PPG 20/40 WHITE @ 66 BBLS/MIN @ 4128 PSI

START 370 BBL 1PPG 20/40 WHITE @ 65 BBLS/MIN @ 4016 PSI

START 386 BBL 2PPG 20/40 WHITE @ 65 BBLS/MIN @ 3996 PSI

START 284 BBL 3PPG 20/40 WHITE @ 65 BBLS/MIN @ 4002 PSI

START 145 BBL 4PPG 20/40 WHITE @ 65 BBLS/MIN @ 3957 PSI

START 179 BBL 4PPG 20/40 COOLSET @ 65 BBLS/MIN @ 4063 PSI

START 222 BBL SLICK WATER FLUSH @ 65 BBLS/MIN @ 4091 PSI

SHUT DOWN

ISIP: 3,039 PSI, 5 MIN: 2,639 PSI, 10 MIN: 2,533 PSI, 15 MIN: 2,505 PSI

MAX WHTP: 4,440 PSI, AVG WHTP: 4,026 PSI

MAX RATE 66.4 BBL/MIN, AVG RATE: 61.2 BBL/MIN

PROP TOTAL: 117,300 LBS 20/40 COOLSET 13,520 20/40 WHITE 98,780 LBS. 100 MESH 5000 LBS. PLAN TOTAL: 116,564 LBS

TOTAL BBLS PUMPED: 3,004 BBLS

TOTAL FLUID TO RECOVER: 2,900 BBLS

TOTAL BBLS ACID: 60 BBLS

HAND OVER TO ARCHER WL

R/U ARCHER WL LUBRICATOR

RIH W/ JUNK BASKET AND 4.60" GUAGE RING. POOH.

RIH W/ 5-1/2" 10K FLOW-THRU FRAC PLUG AND SET @ 9060'. POOH

RUN 3-3/8" SCALLOPED TAG GUNS (25GM, 0.42 EHD & 48.47" PEN) @ 4 SPF AND 90 DEGREE PHASING. CORRELATED TO APOLLO CBL/GR/CCL  
LOG DATED 9/16/03. PERF UPPER BONE SPRING FORMATION FROM 9004' TO 8603' PER PROG. PERF INTERVALS ARE INCLUSIVE TO DEPTH.

8623' - 8626' = 3' X 4 = 3 SHTS - RUN # 4

8603' - 8614' = 11' X 4 = 44 SHTS - RUN # 4

8654' - 8657' = 3' X 4 = 12 SHTS - RUN #3

8645' - 8649' = 4' X 4 = 16 SHTS - RUN #3

8633' - 8640' = 7' X 4 = 21 SHTS - RUN #3

RE HEAD CABLE

8762' - 8766' = 4' X 4 = 16 SHTS - RUN #2

8718' - 8725' = 7' X 4 = 21 SHTS - RUN #2

8686' - 8699' = 13' X 4 = 52 SHTS - RUN #2

8997' - 9004' = 7' X 4 = 21 SHTS - RUN #1

8833' - 8842' = 9' X 4 = 36 SHTS - RUN #1

8769' - 8788' = 9' X 4 = 36 SHTS - RUN #1

TOTAL SHTS PLANNED - 287

VISUALLY VERIFIED ALL SHOTS FIRED

Report Start Date: 11/14/2015

Com

POOH WITH LAST PERF GUN.  
DISCONNECT LUBRICATOR





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Com

SAFETY MEETING W/ CUDD TO DISCUSS ACID JOB

ACID FRAC DOWN 5-1/2" CASING AS FOLLOWS:

START 40 BBLs TREATED WATER @ 10 BBL/MIN @ 2758 PSI (BREAK @2837 PSI)  
START 66 BBLs 15% HCL ACID @ 12 BBL/MIN @ 2841 PSI  
START 30 BBLs XL 15% HCL ACID @ 15 BBL/MIN @ 2457 PSI  
START 66 BBLs 15% HCL ACID @ 15 BBL/MIN @ 2480 PSI  
START 30 BBLs XL 15% HCL ACID @ 15 BBL/MIN @ 2451 PSI  
START 105 BBLs 15% HCL ACID @ 13 BBL/MIN @ 2440 PSI  
START 210 BBL FLUSH @ 15 BBL/MIN @ 2435 PSI

ISIP: 2510 PSI  
5 MIN: 2219 PSI  
10 MIN: 2028 PSI  
15 MIN: 1757 PSI

MAX PRESSURE: 3313 PSI  
AVG PRESSURE: 2543 PSI  
MAX RATE: 18.1 BBL/MIN  
AVG RATE: 15.2 BBL/MIN  
FLUID TO RECOVER: 545 BBLs

RDMO ARCHER WL, CUDD ENERGY SERVICES, GUARDIAN TREE SAVER.  
INSTALL B-1 FLANGE, NEDDLE VALVE, ANF PRESSURE GUAGE ON WELL HEAD.

NO ACTIVITY AT WELL SITE

Report Start Date: 11/15/2015

Com

NO ACTIVITY AT WELL SITE

Report Start Date: 11/25/2015

Com

ROAD RIG FROM CDU-103 TO NEUHAUS 14 FED #004

JSA REVIEW AND TGSM FOR SPOT IN RIG/EQPT AND REV UNIT EQPT.

CHECK WELL PRESSURE. CSG: 600 PSI.

MIRU PULLING UNIT AND REV OPTR EQPT. SPOT TANKS, REV PIT AND PUMP, R/U FLOW LINES, SPOT IN TBG RACKS, AND MOVE PROD TBG TO RACKS. TAKE 8.6 PPG BRINE DELVS.

BLEED OFF PRESSURE TO BD TANK. OBSERVED WELL FOR 30 MINS, NO PRESSURE. RECOVERED ~50 BBLs FLUID, ~ 75% OIL. FLOWBACK CREW NOT REQUIRED

P/U, ISOLATE, AND SECURE TOOLS AND EQPT. SECURE WELL

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 11/26/2015

Com

NO ACTIVITY AT WELL SITE

Report Start Date: 11/27/2015

Com

NO ACTIVITY AT WELL SITE

Report Start Date: 11/28/2015

Com

NO ACTIVITY AT WELL SITE

TOOK 100 BBL 8.6 PPG BRINE DELV AND TRANSFERED 80 BBLs 8.6 BRINE FROM PIT TO BULF STORAGE TANK.

\*\*\*\*NOTE\*\*\*\*PRESSURE CHECK: 500 PSI ON CSG - OBSERVED ON FRAC VALVE GAUGE.

NO ACTIVITY AT WELL SITE

Report Start Date: 11/29/2015

Com

NO ACTIVITY AT WELL SITE

Report Start Date: 11/30/2015

Com

NO ACTIVITY AT WELL SITE.

CREW TRAVEL TO LOCATION

JSA REVIEW/SIGN AND PTSM

CHECK WELL PRESSURE: 600 PSI ON CSG.





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

FLOW BACK WELL TO 50 PSI. PUMPED 10 BBLS 8.6 PPG BRINE TO KILL WELL.. WELL WENT ON A VACUUM.

RECOVERED ~16 BBLS FLUID TO BD TANK.

\*\*\*\*\*NOTE\*\*\*\*\* RIG DRILLS DUE. CONDUCTED/DISCUSSED RIG DRILLS W/ CREW DURING FLOW BACK.

MONITOR WELL PRESSURE FOR 30 MINS. NO PRESSURE RETURN.

JSA REVIEW/SIGN W/ WSI, D&L, KEY, AND SMITH FOR N/D FRAC VALVE, N/U AND TEST BOPE

WSI LANDED HANGER W/ 2-WAY CHECK. IN WH. N/D 10K FRAC VALVE.

N/U BOPE AND ASSOC EQPT.

CHART TEST BOP PIPE AND BLIND RAMS TO 250L FOR 5 MINS/1000H FOR 10 MINS.

\*\*\*\*\*NOTE\*\*\*\*\* DURING BLIND RAMS HIGH TEST, WSI TEST TRUCK BROKE DOWN W/ VEHICLE OVER TEMP ISSUE. TIED CHART TEST EQPT INTO 1/2" GUAGE NIPPLE ON RIG PUMP FLOW LINE AND CONTINUED CHART TEST OF BOPE. APPROX 30 MNS TO RECONFIGURE LINES AND EQPT.

USING RIG PUMP AND WSI CHART TEST EQPT, CHART TEST BOP PIPE AND BLIND RAMS TO 250L FOR 5 MINS/1000H FOR 10 MINS EA. GOOD TEST. R/D WSI CHART TEST EQPT.

CREW LUNCH

R/U ENVIROPAN AND WORK FLOOR.

M/U AND P/U 4-3/4" MTB, XOs, AND 6 DCs

- (1) 1.26' 2-3/8" IF PIN X 2-7/8" EUE BOX
- (1) 29.72' 3-1/2" X 1-5/8" DRILL COLLAR
- (1) 31.11' 3-7/16" X 1-1/2" DRILL COLLAR
- (1) 29.38' 3-7/16" X 1-5/8" DRILL COLLAR
- (1) 30.07' 3-7/16" X 1-1/2" DRILL COLLAR
- (1) 30.52' 3-1/2" X 1-1/2" DRILL COLLAR
- (1) 31.24' 3-1/2" X 1-1/2" DRILL COLLAR
- (1) 1.23' 2-7/8" REG BOX 2-3/8" IF BOX (3-5/8"X2")
- (1) .45' 4-3/4" MILL TOOTH BIT

TOTAL BHA LENGTH: 184.98'

P/U AND TIH W/ BHA ON 115 JTS 2-7/8" L-80 WS T/~3912'.

P/U, ISOLATE, AND SECURE TOOLS AND EQPT. SECURE WELL

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/1/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

CHECK WELL PRESSURE = 150 PSI ON CSG/TBG  
BLOW DOWN CSG PRESSURE TO 0 PSI  
PUMP 30 BBLS 8.6 BW DOWN CSG, CSG ON VACUUM  
FLOW BACK TRAPPED PRESSURE (GAS & OIL) IN TBG TO REV PIT TO 0 PSI  
PUMP 10 BBLS 8.6 BW DOWN TBG, TBG ON VACUUM  
RECOVERD ~ 1 GALLON 90% OIL IN REV PIT

SM JSA REVIEW  
CHECK & CALIPER ELV FOR CORRECT SIZE AND LOG.  
COMPLETED RIG OPS WELL CONTROL CHECKLIST

MONITOR WELL, WELL ON VACUUM

CONT TO RIH 4 3/4" MTB, BHA W/ 2 7/8" L80 WS, TAG FLOW THROUGH FRAC PLUG AT 9051'. (274 JTS)

INSTALL STRIPPER HEAD  
ADJUST RIG FLOOR  
R/U POWER SWIVEL

LOAD WELL W/80 BBL 8.6# BW  
AT 3 BPM  
ESTABLISH REV CIRCULATION AT 450 PSI

DRILL OUT FRAC PLUG F/ 9151' - T/ 9153'

WOB: 6 PTS  
TORQ: 900  
RPM: 50  
ROP: 1'





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

LOST MOST OF THE CIRCULATION DURING PLUG DRILL OUT

CONT TO PUMP 8.6 BW WITH HEAVY OIL RETURNS.  
PUMPED A TOTAL ~400 BBLS W/ ~ 77 BBL HEAVY OIL RETURN.

CONSULTED W/ WOE HALL ADVISED TO CONT RIH TO TAG FILL

R/D POWER SWIVLE

CONT TO RIH 4 3/4" MTB, BHA W/ 2 7/8" L80 WS, FROM 9053' TAG FILL AT 10032'

TOH STAND BACK 150 STAND WS F/ 10032 - T/ ~250' (1 STD & BHA)

INSTALL CHECK VALVE 2 JTS ABOVE BHA.

RIH 4 3/4" MTB, BHA W/ 2 7/8" L80 WS  
20 STD T/~1550. SIFN

P/U, ISOLATE, AND SECURE TOOLS AND EQPT. SECURE WELL

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

**Report Start Date:** 12/2/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST

CHECK WELL PRESSURE = 125 PSI ON CSG/TBG

BLOW DOWN CSG PRESSURE TO 25 PSI PUMP 20 BBLS 8.6 BW DOWN CSG,  
CSG ON VACUUM  
BLOW DOWN TRAPPED PRESSURE (GAS) IN TBG TO REV PIT TO 0 PSI.  
TBG ON VACUUM.

PJSM, SPOT MI RU AIR FOAM UNIT, MANIFOLD, ASSOC IRONS

CONTINUE TIH ON 2-7/8" L-80 WS F/~1550' TO TAG @ 7585' (228 JTS).

INSTALL STRIPPER HEAD  
ADJUST RIG FLOOR

R/U WELL-FOAM TO WELL  
LOAD HOLE

30 GPM  
5 GALS SOAP PER HR  
1150 CFM

BREAK CIRCULATION BY PUMPING 60 BBLS OF 8.6 # BW @ 7585'

RIH W/ 302 JTS OF 2-7/8" L80 WS.  
TAGGED FILL @ 10032'.

R/U POWER SWIVEL  
INSTALL CHECK VALVE

CLEAN OUT WELL WITH FOAM AND 4 3/4" MTB W/ 2 7/8" WS F/ 10032' - T/ 10132' (306 JTS)

PARAMETERS:  
1150 CFM  
4.5 GALS OF SOAP PER HR  
30 GPM  
GOOD RETURNS  
PS SET @ 65 RPM  
WOB 1 - 2 PTS  
TORQUE 800-1300 FT/LBS  
ROP 45 FPH

NOTE: BETWEEN 10032' - 10132, ROP WAS STEADY, RECOVERING FRAC SANDS, AT 10132', MTB HIT SOLID OBJECT. MILLED ON OBJECT FOR 45 MIN W/O PERITATION. NOTIFIED WOE HALL WHO CALLED 10132' DEEP ENOUGH. ( 172' RAT HOLE)

CIRCULATE WELL CLEAN  
200 - 350 PSI CIRC PRESSURE ON CSG.

TOTAL BBLS PUMPED - 307





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

L/D POWER SWIVEL

POOH AND STAND BACK 48 STD OF 2-7/8" L80 WORK STRING ABOVE TOP PERF @ 8566'

SIFN

P/U, ISOLATE, AND SECURE TOOLS AND EQPT. SECURE WELL

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/3/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST

CHECK WELL PRESSURE = 450 PSI ON CSG/TBG

BLOW DOWN CSG PRESSURE TO 50 PSI PUMP 30 BBLS 8.6 BW DOWN CSG,  
CSG ON VACUUM

BLOW DOWN TRAPPED PRESSURE (GAS) IN TBG TO REV PIT TO 0 PSI.  
TBG ON VACUUM.

TIH, 4 3/4" MTB AND MILLING BHA W/ 2-7/8" L-80 WS F~8566' TO TAG FILL @ 10132' (306 JTS). NO FILL OVERNIGHT,

POOH STAND BACK 2 7/8" L80 WORK STRING (153 STDs)

LD BHA AND MTB

CREW LUNCH

P/U 5 1/2" ARROW SET 10K PKR

RIH W/ 2 7/8" L80 WS TO 8583'

SET PKR AT 8583' (264 JTS)  
17 PTS COMPRESSION

LOAD BACKSIDE W/ 15 BBL 8.6# BW  
TEST PKR T/500 PSI FOR 5 MIN, TEST GOOD

RU SWAB EQUIPMENT AND INSPECT SWAB LINE

P/U, ISOLATE, AND SECURE TOOLS AND EQPT. SECURE WELL

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/4/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST CHECK WELL  
PRESSURE = 0 PSI ON CSG/150 ON TBG

CHECK WELL PRESSURES - TBG: 150 PSI, CSG: 0 PSI. BLEW DOWN TBG PRESSURE (GAS) TO REV PIT TO 0 PSI. PUMPED 15 BBLS 8.6 BW DOWN  
TBG, TBG WENT ON VACUUM.

UNSET PKR SET @ 8582' AND TIH ADDITIONAL 12 STANDS T/9359' AND RE-SET PKR.

RIG UP SWAB EQUIPT TO SWAB WELL.

Swabbing Lower Bone Spring perms

1st set 3 runs:

Run1 - begin fluid lvl - 1400', vol recvrd 5 bbls. Fluid Description (water w/ oil) 5% oil.

Run2 - begin fluid lvl - 1450', vol recvrd 5 bbls. Fluid Description (water w/ oil) 3% oil.

Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ oil) 1% oil.

Allowed Well to recover - 10 mins.

Total bbls recovered - 15





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

## 2nd set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ oil) 1% oil.  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ oil) 1% oil.  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 5 mins.

## 3rd set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 10 mins.

Total bbls recovered - 30

## 4th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 5 mins.

## 5th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 10 mins.

Total bbls recovered - 30

## 6th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 5 mins.

## 7th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (water w/ trace oil).

Allowed Well to recover - 10 mins.

Total bbls recovered - 30

Total bbls recovered on Lower Bone Springs: 105 bbls

## CREW LUNCH

## R/D AND STAND BACK SWAB EQPT

UNSET PKR AND TOH F/9359' STANDING BACK 12 STDS 2-7/8" L-80 WS T/8582' AND RESET PKR.

LOAD BACKSIDE W/ 20 BBLs 8.6 BW AND TEST TO 500 PSI/10 MIN. GOOD TEST.

Now Swabbing Both Upper and Lower Bone Spring perms

## 1st set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).

Allowed Well to recover - 5 mins.

## 2nd set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).

Allowed Well to recover - 10 mins.

Total bbls recovered - 30





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

3rd set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).

Allowed Well to recover - 5 mins.

4th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).

Allowed Well to recover - 10 mins.

Total bbls recovered - 30

5th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).

Allowed Well to recover - 10 mins.

6th set 3 runs:

Run1 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water trace oil).  
Run2 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water w/ 1% oil).  
Run3 - begin fluid lvl - 1500', vol recvrd 5 bbls. Fluid Description (black water w/ 1% oil).

Total bbls recovered - 30

Total bbls recovered on Lower Bone Spring Swab: 105 bbls

Total bbls recovered on Upper and Lower Bone Spring Swab: 90

Total Load Recovered For Day: 195 bbls

R/D AND STAND BACK SWAB EQPT. P/U AND SECURE TOOLS AND EQPT. SECURE WELL.

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/5/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST

CHECK WELL PRESSURES - TBG: 250 PSI, CSG: 0 PSI. BLEW DOWN TBG PRESSURE (GAS) TO REV PIT TO 0 PSI. PUMPED 20 BBLs 8.6 BW DOWN TBG, TBG WENT ON VACUUM.

R/D AND L/D SWAB EQPT.

UNSET PKR AND TOH STANDING BACK 2-7/8 L-80 PROD TBG.

JSA REVIEW WITH KEY, SMITH, AND HYDROSTATIC FOR HYDROTEST TBG IN THE HOLE TO 7000 PSI. OPEN PTW FOR HANG/REMOVE SHIV IN DERRICK.

MIRU HYDROSTATIC TESTER EQPT. HANG SHIV

M/U, P/U AND RIH W/ BHA

TBG/BHA DETAIL CONSIST OF:

KB: 15'  
256 - JTS 2-7/8" L-80 TBG - 8311.74'  
1 - JT 2-7/8" L-80 TBG SUB - 4'  
2 - JTS 2-7/8" L-80 TBG - 65.42'  
1 - TAC 2-7/8" X 5-1/2" (8396.16') - 2.65'  
49 - JTS 2-7/8" L-80 TBG - 1579.36'  
2 - JTS 2-7/8" L-80 TK-99 TBG - 65.28'  
1 - 2-7/8" MECH SEAT NIPPLE (10,043.45') - .90'  
1 - JT 2-7/8" L-80 TBG SUB - 4'  
1 - CAVINS DESANDER - 19.25'  
1 - JT 2-7/8" L-80 TBG - 32.73'  
1 - CAVINS DUMP VALVE - .80

EOT: 10,101.13'





# Summary Report

Major Rig Work Over (MRWO)  
Completion - Reconfigure  
Job Start Date: 11/3/2015  
Job End Date: 12/8/2015

Well Name NEUHAUS 14 FEDERAL 004		Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent	
Ground Elevation (ft) 3,671.00	Original RKB (ft) 3,686.00	Current RKB Elevation 3,686.00, 11/10/2014		Mud Line Elevation (ft)	Water Depth (ft)

Com

P/U FROM RACKS AND RIH W 3 JTS 2-7/8" L-80 PROD TBG, HYDROTESTING TBG TO 7000 PSI PER PROGRAM.

\*\*\*\*NOTE\*\*\*\*PAUSED TESTING TO RECONFIGURE SITE DUE TO FORKLIFT AVAILABLE ON LOCATION TO OFF-LOAD RODS. THIS WAS DONE TO SAVE CALLING OUT A SECOND FORKLIFT ON MONDAY TO RECONFIGURE SITE BEFORE RUNNING RODS.

MOVE OUT 12 JTS EXCESS 2-7/8" L-80 TBG FROM RACKS. MOVE OUT PIPE RACKS. SET IN 390 NEW RODS, ROD SUBS, AND ROD BOXES NEAR RIG FLOOR.

CREW LUNCH

FINSIH HYDROTEST 52 STDS (304 JTS) 2-7/8" L-80 PROD TBG IN HOLE TO 7000 PSI.

RDMO HYDROSTATIC TESTING EQPT. R/D TBG TONGS, P/U AND SECURE TOOLS AND SWAB EQPT. SECURE WELL.

CLOSE PTW FOR HANG/REMOVE SHIV FROM DERRICK.

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/6/2015

Com

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/7/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ROD ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST

CHECK WELL PRESSURES - TBG: 50 PSI, CSG: 50 PSI. BLEW DOWN TBG AND CSG PRESSURE (GAS) TO REV PIT TO 0 PSI. PUMPED 50 BBLs 8.6 BW DOWN CSG AND 20 BBLs DOWN TBG, CSG AND TBG WENT ON VACUUM.

R/D WORK FLOOR

N/D AND RECOVER BOP, ENVIROPAN, AND R/D ENVIROVAC AND ACCUMULATOR.

SET TAC @ 8396' W/ 19 PTS.

R/U 2-7/8" B1 WH ADAPTER, ROD BOP, AND PUMPING T W/ HARDWARE.

R/U WORK FLOOR. ROD ELEVATORS, ROD TONGS, AND STRIPPER.

PREP RODS: REMOVE ROD PIN CAPS, CLEAN AND INSPECT PINS, INSTALL ROD BOXES.

P/U AND TIH W/ 1.25" X 24' ROD PUMP (25-125-RHBM-24-6) AND 14 - 1.5" GRADE K SINKER BARS ON 385 7/8" WTF-HD RODS

CREW LUNCH

FINISH TIH W 7/8" WTR-HD SUCKER RODS

PUMP AND ROD STRING DETAILS:

1 - 1.25 X 24' ROD PUMP (25-125-RHBM-24-6) - 24'

1 - 7/8" X 2' 7/8" HD GUIDED ROD SUB W/ FH-T BOX - 4'

14 - 1.5" GRD K K-BARS W/ SH-T BOXES - 350'

385 - 7/8" HD RODS W/ FH-T BOXES - 9675'

1 - 1.5" X 26' SM POLISH ROD - 26'

RIG DOWN WORK FLOOR AND ROD TOOLS

JSA REVIEW/SIGN W/ NOLAN BRUNSON, KEY, AND SMITH FOR ROLL WEIGHTS TO HANG HORSE HEAD.

NOLAN BRUNSON ROLLED WEIGHTS TO HANG HORSE HEAD TO ALLOW HANG HORSE HEAD AND BRIDAL IN A.M.

P/U AND SECURE TOOLS AND EQPT. SECURE WELL.

CREW TRAVEL FROM LOCATION

NO ACTIVITY AT WELL SITE.

Report Start Date: 12/8/2015

Com

WELL SI NO WELL ACTIVITY

CREW TRAVEL

SM JSA REVIEW CHECK & CALIPER ROD ELV FOR CORRECT SIZE AND LOG. COMPLETED RIG OPS WELL CONTROL CHECKLIST

CHECK WELL PRESSURES - TBG: 0 PSI, CSG: 50 PSI. BLEW DOWN CSG PRESSURE TO REV PIT TO 0 PSI.

HANG ON HORSE HEAD

LOAD TBG W/ 10 BBLs OF 8.6 PPG BW.PRESSURE TBG UP TO 500 PSI FOR.5 MINS. BLED DOWN TO 100 PSI. STROKE PUMP W/ PU 9 STROKES TO 550 PSI. HELD FOR 5 MINS. PUMPER VERIFIED TEST. (WILLIAM RABB)

R/D PULLING UNIT AND REV EQ.

MOVE TO F.B. DAVIS #8

\*\*\*FINAL REPORT\*\*\*





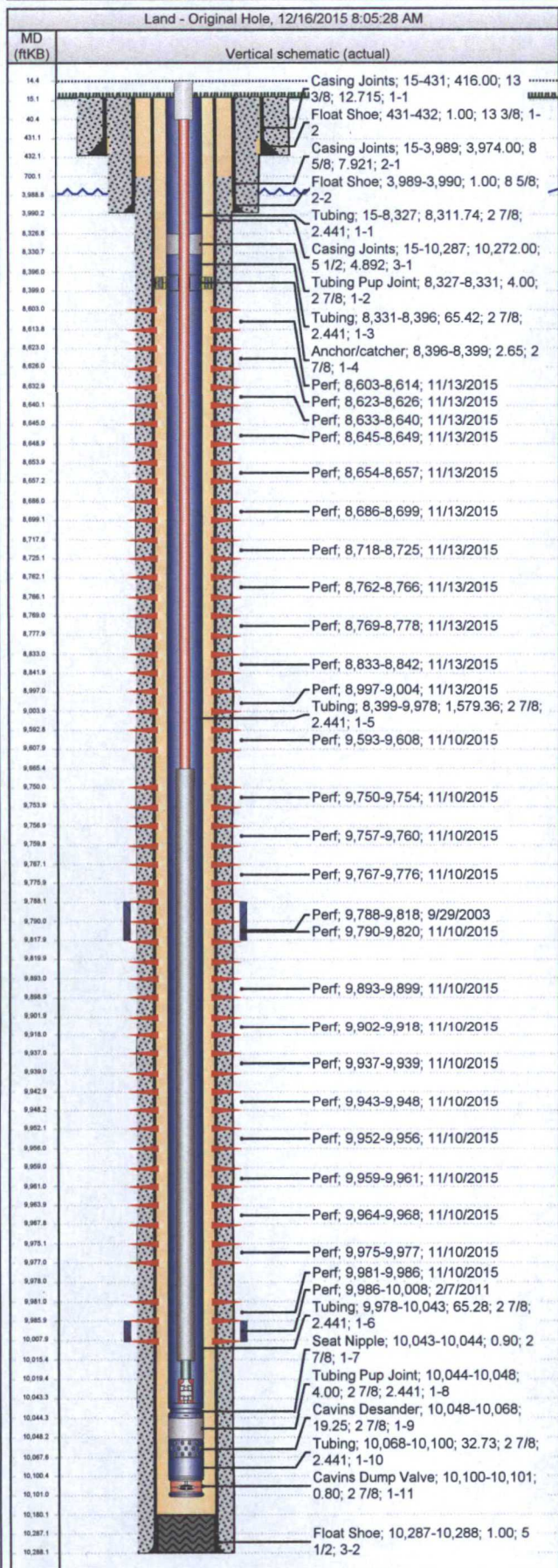
# Wellbore Schematic

Well Name  
NEUHAUS 14 FEDERAL 004

Lease  
NEUHAUS '14' FEDERAL

Field Name  
FEATHERSTONE EAST

Business Unit  
Mid-Continent



## Job Details

Job Category	Start Date	Rig/Unit End Date
Major Rig Work Over (MRWO)	11/3/2015	11/9/2015
Major Rig Work Over (MRWO)	11/10/2015	11/13/2015
Major Rig Work Over (MRWO)	11/13/2015	11/14/2015
Major Rig Work Over (MRWO)	11/14/2015	11/16/2015
Major Rig Work Over (MRWO)	11/25/2015	12/8/2015

## Casing Strings

Csg Des	OD (in)	Wt/Len (lb/ft)	Grade	Top Thread	Set Depth (MD) (ftKB)
Surface	13 3/8	48.00	H-40	ST&C	432
Intermediate	8 5/8	32.00	J-55	ST&C	3,990
Production	5 1/2	17.00	N-80	LT&C	10,288

## Tubing Strings

Tubing - Production set at 10,101.1ftKB on 12/5/2015 11:00

Tubing Description			Run Date		String Length (ft)		Set Depth (MD) (ftKB)	
Tubing - Production			12/5/2015		10,086.13		10,101.1	
Item Des	Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Btm (ftKB)		
Tubing	256	2 7/8	6.50	L-80	8,311.74	8,326.7		
Tubing Pup Joint	1	2 7/8			4.00	8,330.7		
Tubing	2	2 7/8	6.50	L-80	65.42	8,396.2		
Anchor/catcher	1	2 7/8			2.65	8,398.8		
Tubing	49	2 7/8	6.50	L-80	1,579.36	9,978.2		
Tubing	2	2 7/8	6.50	TK-99 L-80	65.28	10,043.5		
Seat Nipple	1	2 7/8			0.90	10,044.4		
Tubing Pup Joint	1	2 7/8	6.50	L-80	4.00	10,048.4		
Cavins Desander	1	2 7/8			19.25	10,067.6		
Tubing	1	2 7/8	6.50	L-80	32.73	10,100.3		
Cavins Dump Valve	1	2 7/8			0.80	10,101.1		

## Rod Strings

Rod - Steel on 12/7/2015 15:30

Rod Description			Run Date		String Length (ft)		Set Depth (ftKB)	
Rod - Steel			12/7/2015		10,029.00		10,043.5	
Item Des		Jts	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Btm (ftKB)	
Polished Rod		1	1 1/2			26.00	40.5	
Sucker Rod		385	7/8	2.22	K	9,625.00	9,665.5	
Sinker Bar		14	1 1/2	6.01		350.00	10,015.5	
Pony Rod		1	7/8	2.22	K	4.00	10,019.5	
Rod Pump		1	1 1/4			24.00	10,043.5	

## Perforations

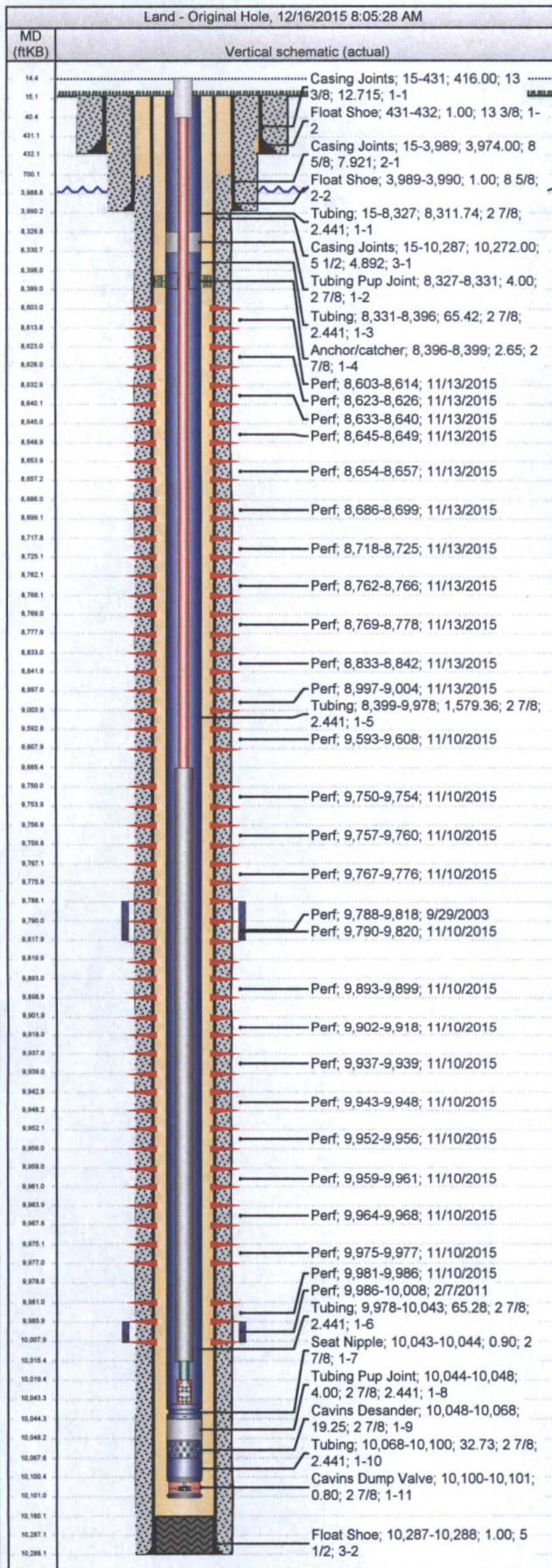
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Zone & Completion
11/13/2015	8,603.0	8,614.0		44	Bone Spring, Original Hole
11/13/2015	8,623.0	8,626.0		12	Bone Spring, Original Hole
11/13/2015	8,633.0	8,640.0		21	Bone Spring, Original Hole
11/13/2015	8,645.0	8,649.0		16	Bone Spring, Original Hole
11/13/2015	8,654.0	8,657.0		12	Bone Spring, Original Hole
11/13/2015	8,686.0	8,699.0		52	Bone Spring, Original Hole
11/13/2015	8,718.0	8,725.0		21	Bone Spring, Original Hole
11/13/2015	8,762.0	8,766.0		16	Bone Spring, Original Hole
11/13/2015	8,769.0	8,778.0		36	Bone Spring, Original Hole
11/13/2015	8,833.0	8,842.0		36	Bone Spring, Original Hole
11/13/2015	8,997.0	9,004.0		21	Bone Spring, Original Hole
11/10/2015	9,593.0	9,608.0		20	Bone Spring, Original Hole
11/10/2015	9,750.0	9,754.0		20	Bone Spring, Original Hole
11/10/2015	9,757.0	9,760.0		20	Bone Spring, Original Hole
11/10/2015	9,767.0	9,776.0		20	Bone Spring, Original Hole
9/29/2003	9,788.0	9,818.0	4.0	121	
11/10/2015	9,790.0	9,820.0		20	Bone Spring, Original Hole





# Wellbore Schematic

Well Name NEUHAUS 14 FEDERAL 004	Lease NEUHAUS '14' FEDERAL	Field Name FEATHERSTONE EAST	Business Unit Mid-Continent
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Perforations					
Date	Top (ftKB)	Btm (ftKB)	Shot Dens (shots/ft)	Entered Shot Total	Zone & Completion
11/10/2015	9,893.0	9,899.0		20	Bone Spring, Original Hole
11/10/2015	9,902.0	9,918.0		20	Bone Spring, Original Hole
11/10/2015	9,937.0	9,939.0		20	Bone Spring, Original Hole
11/10/2015	9,943.0	9,948.0		20	Bone Spring, Original Hole
11/10/2015	9,952.0	9,956.0		20	Bone Spring, Original Hole
11/10/2015	9,959.0	9,961.0		20	Bone Spring, Original Hole
11/10/2015	9,964.0	9,968.0		20	Bone Spring, Original Hole
11/10/2015	9,975.0	9,977.0		20	Bone Spring, Original Hole
11/10/2015	9,981.0	9,986.0		20	Bone Spring, Original Hole
2/7/2011	9,986.0	10,008.0	4.0	88	Bone Spring, Original Hole

Other Strings			
Run Date	Pull Date	Set Depth (ftKB)	Com

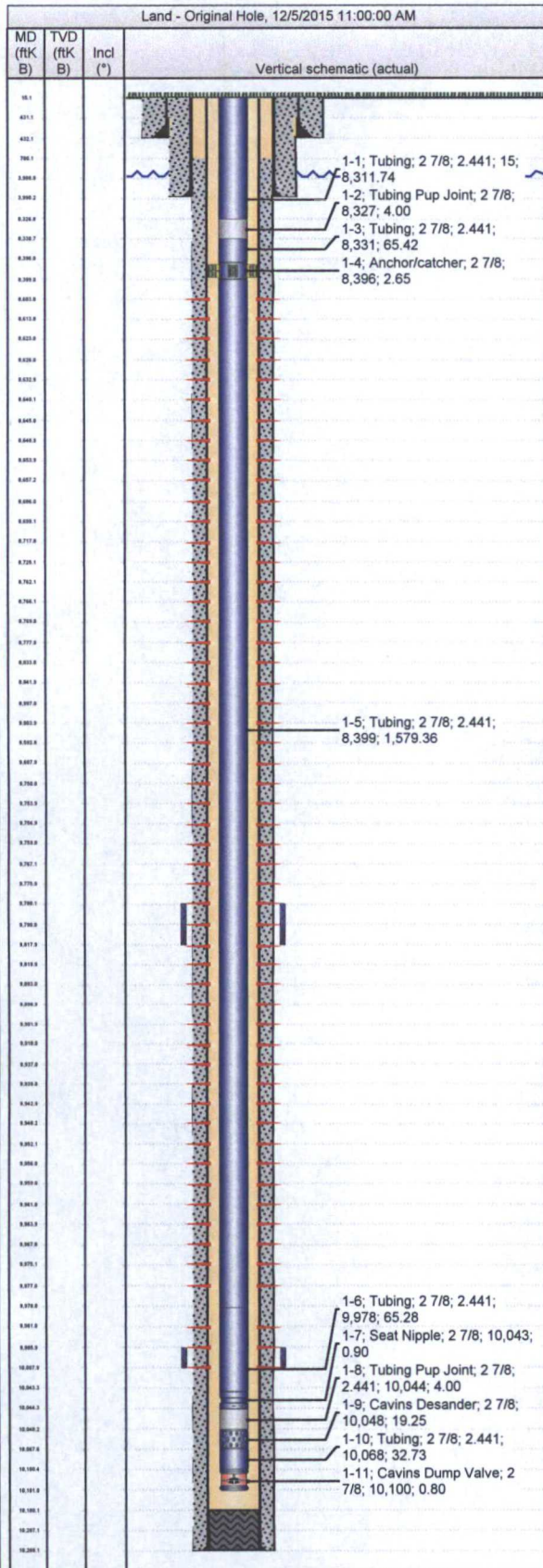
Other In Hole					
Des	Top (ftKB)	Btm (ftKB)	Run Date	Pull Date	Com
Cemented Bridge Plug	9,738.0	9,742.0	9/2/2009	11/6/2015	





# Tubing Summary

Well Name <b>NEUHAUS 14 FEDERAL 004</b>	Lease <b>NEUHAUS '14' FEDERAL</b>	Field Name <b>FEATHERSTONE EAST</b>	Business Unit <b>Mid-Continent</b>	
Ground Elevation (ft) <b>3,671.00</b>	Original RKB Elevation (ft) <b>3,686.00</b>	Current RKB Elevation <b>3,686.00, 11/10/2014</b>	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) <b>15.00</b>	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	



Tubing Strings			
Tubing Description <b>Tubing - Production</b>	Planned Run? <b>N</b>	Set Depth (MD) (ftKB) <b>10,101.1</b>	Set Depth (TVD) (ftKB)
Run Date <b>12/5/2015</b>	Run Job <b>Complete and Suspend, 9/21/2003 00:00</b>	Pull Date	Pull Job <b>Completion - Reconfigure, 11/3/2015 14:00</b>

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
256	Tubing	2 7/8	2.441	6.50	L-80		8,311.74	15.0	8,326.7
1	Tubing Pup Joint	2 7/8					4.00	8,326.7	8,330.7
2	Tubing	2 7/8	2.441	6.50	L-80		65.42	8,330.7	8,396.2
1	Anchor/catcher	2 7/8					2.65	8,396.2	8,398.8
49	Tubing	2 7/8	2.441	6.50	L-80		1,579.36	8,398.8	9,978.2
2	Tubing	2 7/8	2.441	6.50	TK-99 L-80		65.28	9,978.2	10,043.5
1	Seat Nipple	2 7/8					0.90	10,043.5	10,044.4
1	Tubing Pup Joint	2 7/8	2.441	6.50	L-80		4.00	10,044.4	10,048.4
1	Cavins Desander	2 7/8					19.25	10,048.4	10,067.6
1	Tubing	2 7/8	2.441	6.50	L-80		32.73	10,067.6	10,100.3
1	Cavins Dump Valve	2 7/8					0.80	10,100.3	10,101.1

Rod Strings			
Rod Description <b>Rod - Fiberglass</b>	Planned Run? <b>N</b>	Set Depth (ftKB) <b>9,859.0</b>	Set Depth (TVD) (ftKB)
Run Date <b>10/6/2003</b>	Run Job <b>Complete and Suspend, 9/21/2003 00:00</b>	Pull Date <b>3/11/2009</b>	Pull Job <b>Pump Repair, 3/11/2009 00:00</b>

Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)
1	Polished Rod	1 1/2	D		26.00	36.0	62.0
2	Sucker Rod: Fiberglass	1 1/4	D		14.00	62.0	76.0
144	Sucker Rod: Fiberglass	1 1/4	D		5,400.00	76.0	5,476.0
156	Sucker Rod	1	D	78	3,900.00	5,476.0	9,376.0
18	Sinker Bar	1 1/2	D		450.00	9,376.0	9,826.0
1	Shear Coupling	1	D		1.00	9,826.0	9,827.0
1	Rod Sub	1	D		2.00	9,827.0	9,829.0
1	Rod Pump	1 1/2	D		30.00	9,829.0	9,859.0

Rod Description <b>Rod - Fiberglass</b>	Planned Run? <b>N</b>	Set Depth (ftKB) <b>9,859.0</b>	Set Depth (TVD) (ftKB)
Run Date <b>3/12/2009</b>	Run Job <b>Pump Repair, 3/11/2009 00:00</b>	Pull Date <b>9/2/2009</b>	Pull Job <b>Abandon Well - Temporary, 9/2/2009 00:00</b>

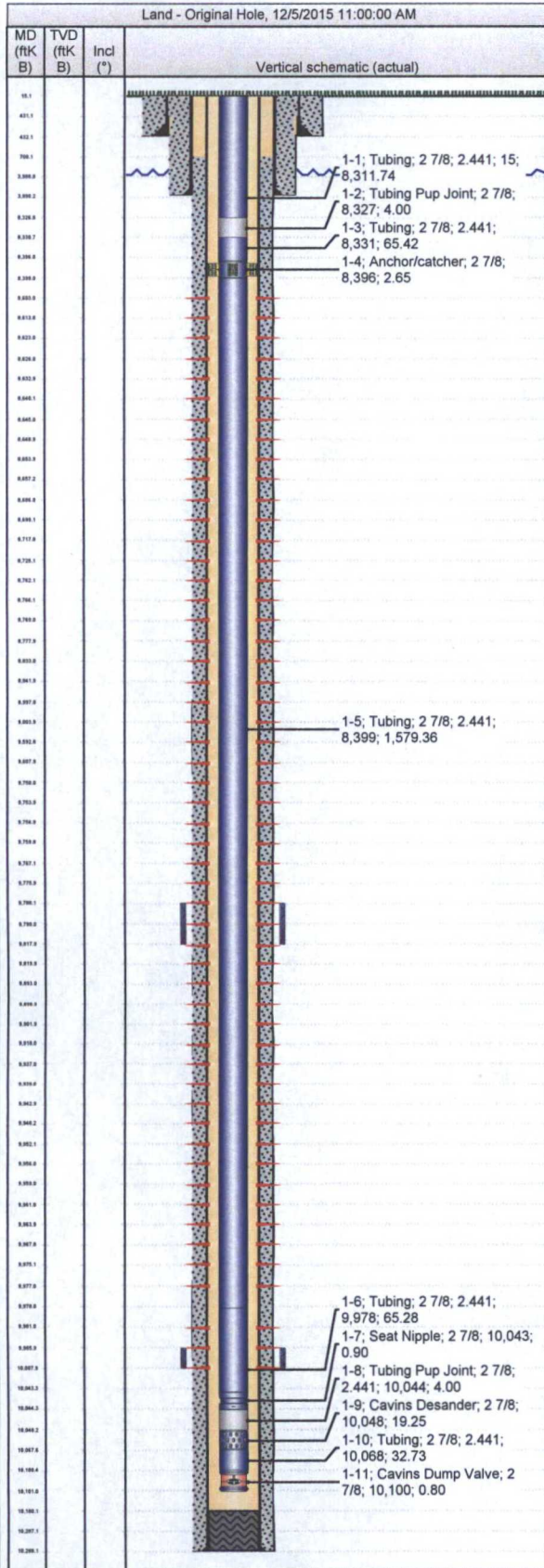
Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)
1	Polished Rod	1 1/2	D		26.00	-1.5	24.5
2	Sucker Rod: Fiberglass	1 1/4	D		14.00	24.5	38.5
144	Sucker Rod: Fiberglass	1 1/4	D		5,437.50	38.5	5,476.0





# Tubing Summary

Well Name <b>NEUHAUS 14 FEDERAL 004</b>	Lease <b>NEUHAUS '14' FEDERAL</b>	Field Name <b>FEATHERSTONE EAST</b>	Business Unit <b>Mid-Continent</b>	
Ground Elevation (ft) <b>3,671.00</b>	Original RKB Elevation (ft) <b>3,686.00</b>	Current RKB Elevation <b>3,686.00, 11/10/2014</b>	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) <b>15.00</b>	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	



## Rod Components

Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)
156	Sucker Rod	1	D	78	3,900.00	5,476.0	9,376.0
18	Sinker Bar	1 1/2	D		450.00	9,376.0	9,826.0
1	Shear Coupling	1	D		1.00	9,826.0	9,827.0
1	Rod Sub	1	D		2.00	9,827.0	9,829.0
1	Rod Pump	1 1/2	D		30.00	9,829.0	9,859.0

Rod Description <b>Rod - Steel</b>	Planned Run? <b>N</b>	Set Depth (ftKB) <b>10,043.5</b>	Set Depth (TVD) (ftKB)
Run Date <b>12/7/2015</b>	Run Job <b>Completion - Reconfigure, 11/3/2015 14:00</b>	Pull Date	Pull Job

## Rod Components

Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)
1	Polished Rod	1 1/2		Alloy Steel	26.00	14.5	40.5
385	Sucker Rod	7/8	K	Grade 40	9,625.00	40.5	9,665.5
14	Sinker Bar	1 1/2			350.00	9,665.5	10,015.5
1	Pony Rod	7/8	K	Grade 40	4.00	10,015.5	10,019.5
1	Rod Pump	1 1/4			24.00	10,019.5	10,043.5