

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

HOBBSOCD

FORM 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.*

JAN 05 2015

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

RECEIVED

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NNMM16835
2. Name of Operator CHEVRON USA INCORPORATED		6. If Indian, Allottee or Tribe Name
Contact: DENISE PINKERTON E-Mail: leakejd@chevron.com		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 15 SMITH ROAD MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 432-687-7375	8. Well Name and No. NEUHAUS 14 FED 04
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		9. API Well No. 30-025-36353-00-S1
		10. Field and Pool, or Exploratory FEATHERSTONE
		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 checked="" 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 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 type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input checked="" type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

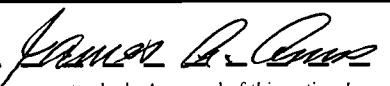
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths 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 recompletion 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.)

CHEVRON IS REQUESTING TO EXTEND THE TA STATUS ON THE SUBJECT FOR 1 YR BECAUSE WE ARE INTERESTED IN RECOMPLETING THE WELL. WE HAVE BEEN UNABLE TO RECOMPLET THE WELL TO THIS POINT BECAUSE OF SERVICE COMPANY AVAILABILITY. THERE HAVE BEEN SEVERAL NEW DEVELOPMENTS IN SE NM LATELY AND THE MAJORITY OF THE DEVELOPMENT HAS BEEN MULTI-STAGE HORIZONTAL COMPLETIONS. IT HAS BEEN A MAJOR CHALLENGE TO HAVE SERVICE COMPANIES FRACE WELLS FOR SMALL 1 STAGE VERTICAL RECOMPLETIONS. THEY ARE NOT ECONOMICALLY ATTRACTIVE AT THIS POINT IN TIME BUT SHOULD BE IN THE NEAR FUTURE. PLEASE FIND ATTACHED, THE GEOLOGICAL ASSESSMENT FOR THE SUBJECT WELL SHOWING THE ZONE CHEVRON IS INTERESTED IN EXTENDING THE TA STATUS. ALSO FIND ATTACHED, THE WELLBORE DIAGRAM.

MR. JIM AMOS, BLM, HAS RECOMMENDED THIS INTENT, AND HAD CONVERSATION WITH CHEVRON ENGINEER, ABDUL SULE. ANY QUESTIONS SHOULD BE DIRECTED TO MR. SULE @ 432-687-7419.

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #285099 verified by the BLM Well Information System For CHEVRON USA INCORPORATED, sent to the Hobbs Committed to AFMSS for processing by JIM AMOS on 12/29/2014 (15JA0051SE)	
Name (Printed/Typed) DENISE PINKERTON	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 12/15/2014

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By 	Title SPET	Date 12-29-14
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 CFD	

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 \*\***

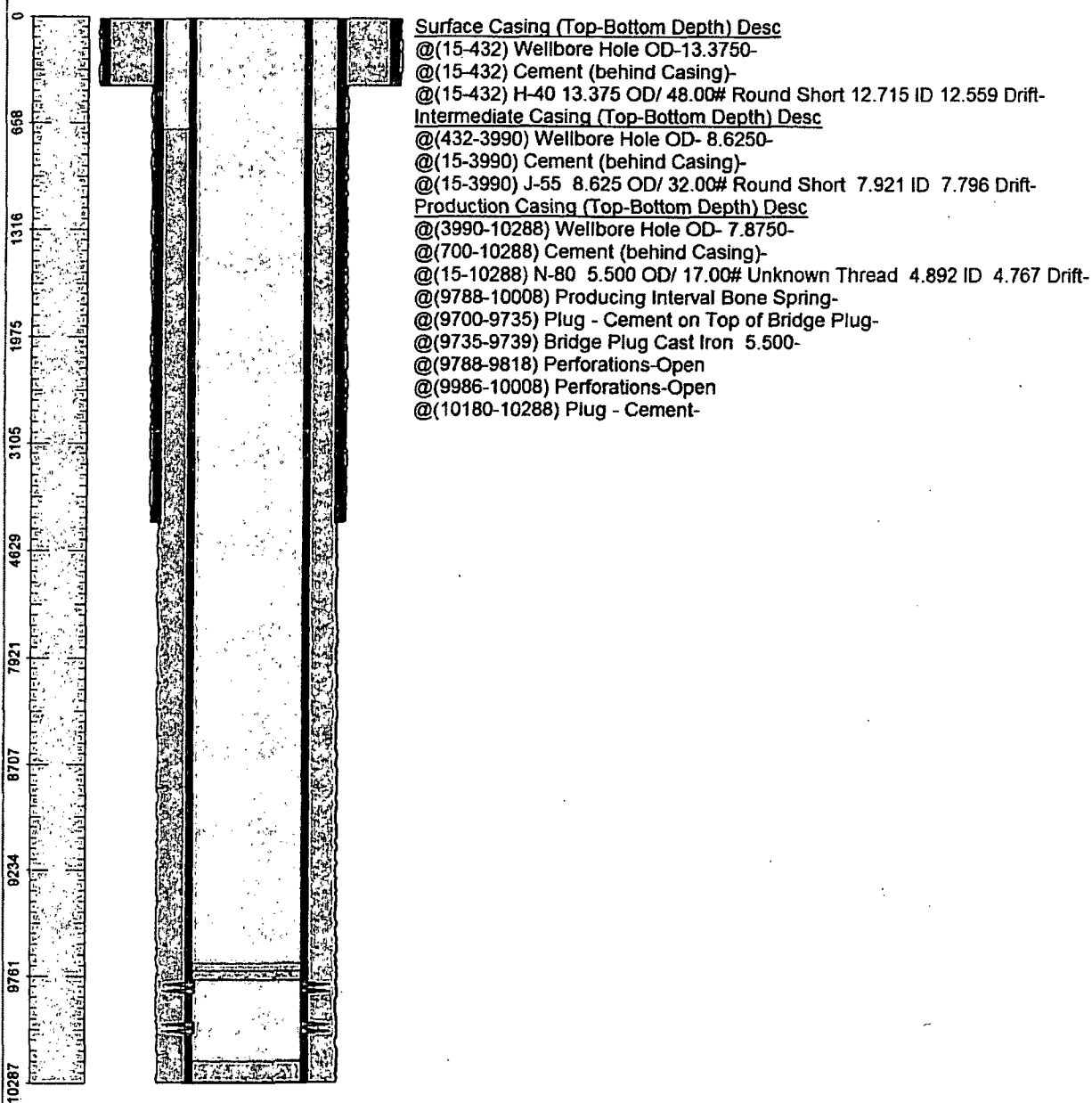
MAB/OCD 1/7/2015

JAN 08 2015

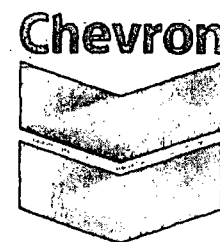


## Chevron U.S.A. Inc. Wellbore Diagram : NEU 14 F 4

Lease: OEU EUNICE FMT		Well No.: NEUHAUS 14 FEDERAL 4 T/A 4		Field: FEATHERSTONE EAST	
Location: 1980FNL1650FEL		Sec.: N/A		Blk:	Survey: N/A
County: Lea	St.: New Mexico	Refno: HL7064		API: 3002536353	Cost Center: UCRD40200
Section: E035		Township: 14			Range: S020
Current Status: Temporarily Abandoned				Dead Man Anchors Test Date: 01/23/2013	
Directions:					



Ground Elevation (MSL): 3671.00	Spud Date: 08/24/2003	Compl. Date: 01/01/1800
Well Depth Datum: Kelly Bushing	Elevation (MSL): 3686.00	Correction Factor: 15.00
Last Updated by: fitecl	Date: 12/12/2013	



## **Geological Assessment Neuhaus 14 Fed 4**

Well Name:	Neuhaus 14 Fed 4	API#:	3002536353
Location:	T20S, R35E, Sec. 14	Geologist:	W. Anderson
County:	Lea	Engineer:	A. Sule
State:	NM	FMT:	Eunice

---

### **EXECUTIVE SUMMARY**

Recommend adding Upper, 1<sup>st</sup>, and 2<sup>nd</sup> Bone Spring intervals and re-stimulating the current producing interval. These recommendations are based off mudlog shows, offset production, and well log interpretation.

### **WELL HISTORY**

Neuhaus 14 Fed 4 is currently TA'd and the TA permit expires in December 2014. The well was originally completed in the 1<sup>st</sup> Bone Spring in 2003, but was shut in by 2004. Concho proposed a recompletion in the Delaware Mountains Group, but there is no indication that the work was ever preformed. They returned the well to production in 2009 when Concho sold the well to Chesapeake. In 2011 Chesapeake added a zone below the existing perfs in the 2<sup>nd</sup> Bone Spring (see wellbore diagram).

### **JUSTIFICATION**

Current completions in the 1<sup>st</sup> and 2<sup>nd</sup> Bone Spring appear to be targeting some of the oil and gas shows from the mudlog. After reviewing the completed intervals in the 1<sup>st</sup> and 2<sup>nd</sup> Bone Spring I noticed that some of the produced zones do not cover all of the porosity intervals for the mudlog show (see wireline logs). I recommend extending the current intervals into the additional porosity and re-stimulating the entire interval.

In addition to the previously perfed interval in the 1<sup>st</sup> and 2<sup>nd</sup> Bone Spring the mudlog from this well shows a large gas zone in the upper Bone Spring. This gas zone is apparent on the well logs because of a prominent crossover or "Gas Effect" between the neutron and density logs across this interval (see wireline logs). Although there are no offset wells producing from this gas zone the high porosity and low calculated water saturation, shown in the proposed perf table, make this an excellent recompletion target. Also, this can be comingled with the current intervals because it's still within the Bone Spring formation/pool.

## ISSUES

The Neuhaus 14 Fed 5 is the only well currently producing on this lease. This lease has been identified as a high priority by the AD team for future development. If we are able to RTP/recomplete the Neuhaus 14 Fed 4 it could decrease the risk of losing the lease if the Neuhaus 14 Fed 5 were to lose production.

There may be additional opportunities in the Delaware Mountains group, but the Bone Spring appears to be the best recompletion candidate at this time.

### Proposed Perf Interval: Bone Spring

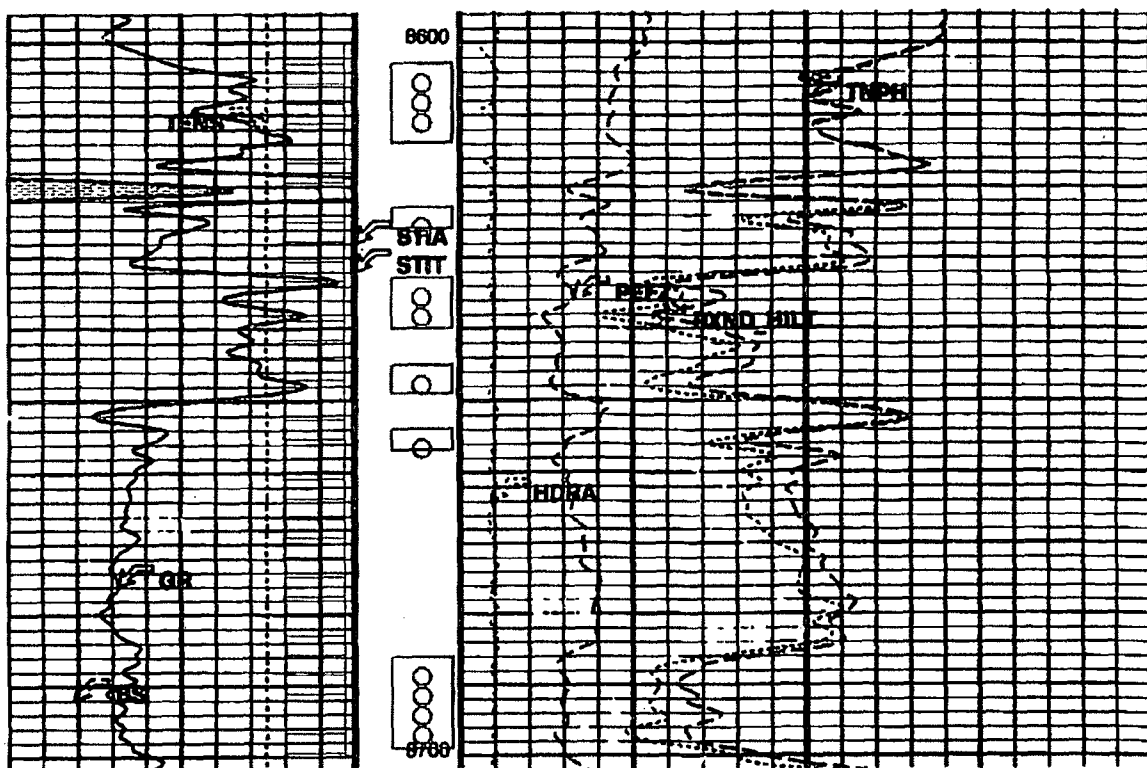
<u>Top (md)</u>	<u>Base (md)</u>	<u>Net (ft)</u>	<u>Avg. Porosity</u>	<u>Rt</u>	<u>Rw</u>	<u>Sw</u>	<u>Gas Effect</u>	<u>GR (API)</u>	<u>Additional Comments</u>
8603	8614	11	8%	800	0.025	7%	No		Gas Show on ML
8623	8626	3	14%	4000	0.025	2%	Yes		Gas Show on ML
8633	8640	7	19%	3000	0.025	2%	Yes		Gas Show on ML
8645	8649	4	18%	3300	0.025	2%	Yes		Gas Show on ML
8654	8657	3	16%	4000	0.025	2%	Yes		Gas Show on ML
8686	8699	13	18%	3000	0.025	2%	Yes		Gas Show on ML
8718	8725	7	10%	1500	0.025	4%	Yes		Gas Show on ML
8762	8766	4	24%	3000	0.025	1%	Yes		Gas Show on ML
8769	8778	9	18%	2000	0.025	2%	Yes		Gas Show on ML
8833	8842	9	12%	2300	0.025	3%	Yes		Gas Show on ML
8997	9004	7	7%	300	0.025	13%	Yes		
9593	9608	15	9.5%	3	0.024	94%	Yes		1 <sup>st</sup> Bone Spring
9750	9754	4	8%	6	0.024	79%	No		1 <sup>st</sup> Bone Spring
9757	9760	3	8%	11	0.024	58%	No		1 <sup>st</sup> Bone Spring
9767	9776	9	12%	180	0.024	10%	No		1 <sup>st</sup> Bone Spring
9893	9899	6	15%	35	0.024	17%	No		1 <sup>st</sup> Bone Spring
9902	9918	16	12%	60	0.024	17%	No		1 <sup>st</sup> Bone Spring
9937	9939	2	9%	3000	0.024	3%	No		2 <sup>nd</sup> Bone Spring
9943	9948	5	11%	300	0.024	8%	No		2 <sup>nd</sup> Bone Spring
9952	9956	4	8%	1000	0.024	6%	Yes		2 <sup>nd</sup> Bone Spring
9959	9961	2	6%	4 E4	0.024	1%	Yes		2 <sup>nd</sup> Bone Spring
9964	9968	4	8%	400	0.024	10%	Yes		2 <sup>nd</sup> Bone Spring
9975	9977	2	9%	4000	0.024	3%	Yes		2 <sup>nd</sup> Bone Spring
9981	9986	5	8%	23	0.024	40%	No		2 <sup>nd</sup> Bone Spring

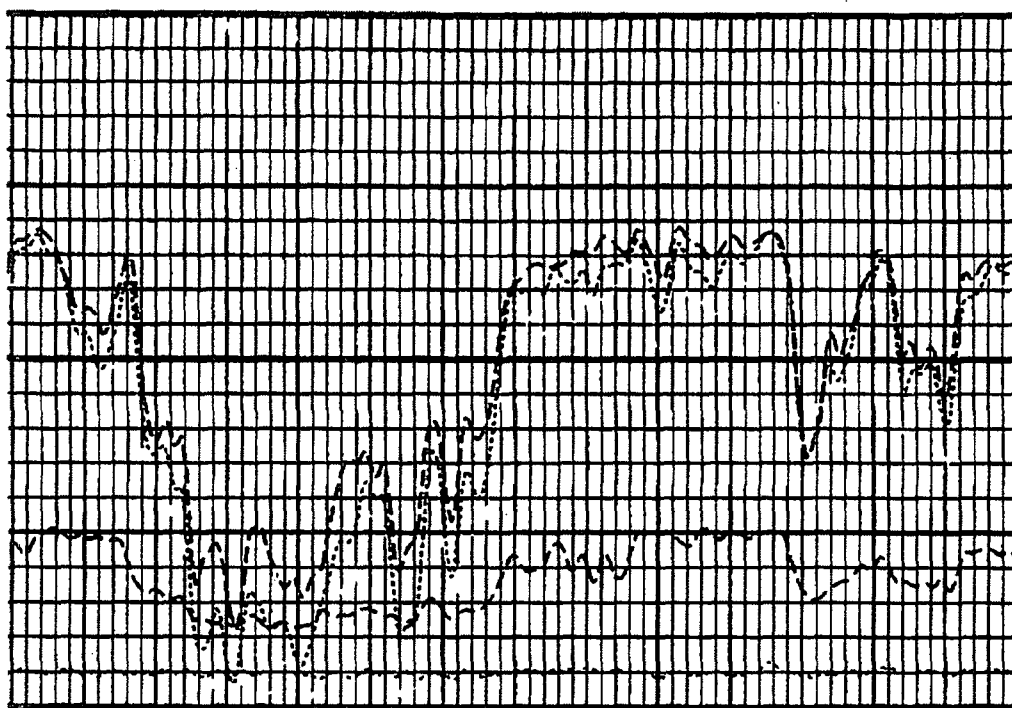
\*Amount of cross over or "gas effect" varies. Most prominent in the upper intervals where there is a gas show.

Wireline Logs:

		Env. Corr. Thermal Neutron Porosity (TNPH)		0.3	(V/V)	-0.1
Tension (TENS)		Std. Rec. Formation P <sub>o</sub> (PEFZ)		0	10	
10000	(LBF)	0	(—)			
		H <sub>2</sub> O Porosity Cross-Plot (POND HLT)		0.3	(V/V)	-0.1
Gamma Ray (GR)		Density Correction (HDRA)		-0.05	0.45	
0	(GAPI)	100	(G/C3)			
Gamma Ray Backup		Stuck Stretch (STIT)		0	50	
		(F)				

Main Pass 5 in. = 100 R. (Limestone Matrix 2.71 g/cc)





∞

∞

∞ ∞ ∞

8800

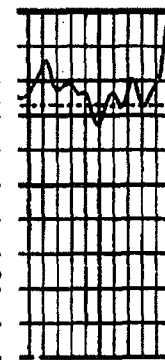
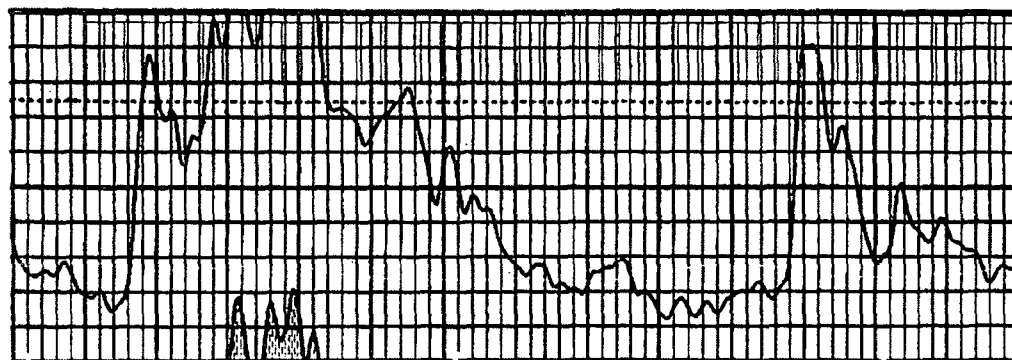
∞ ∞ ∞

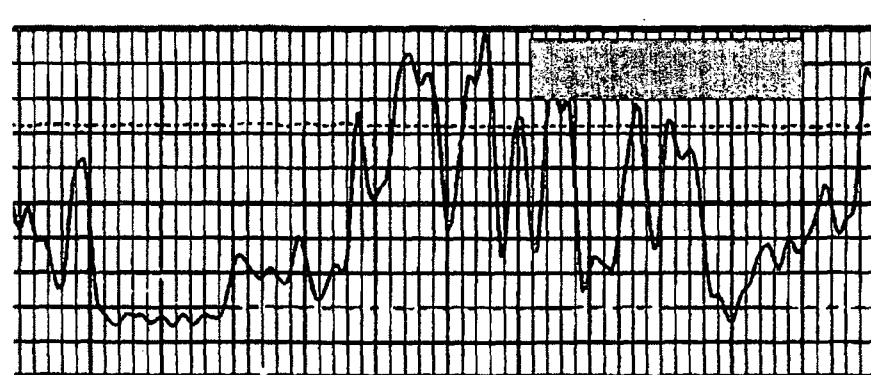
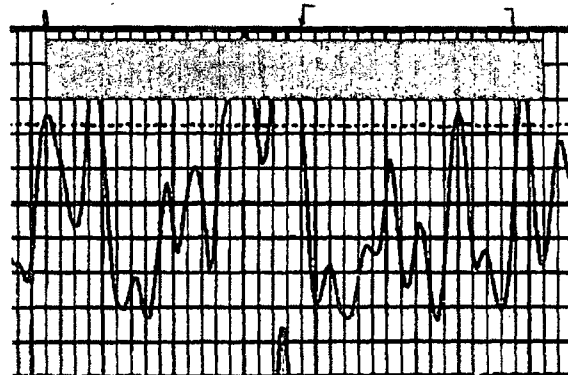
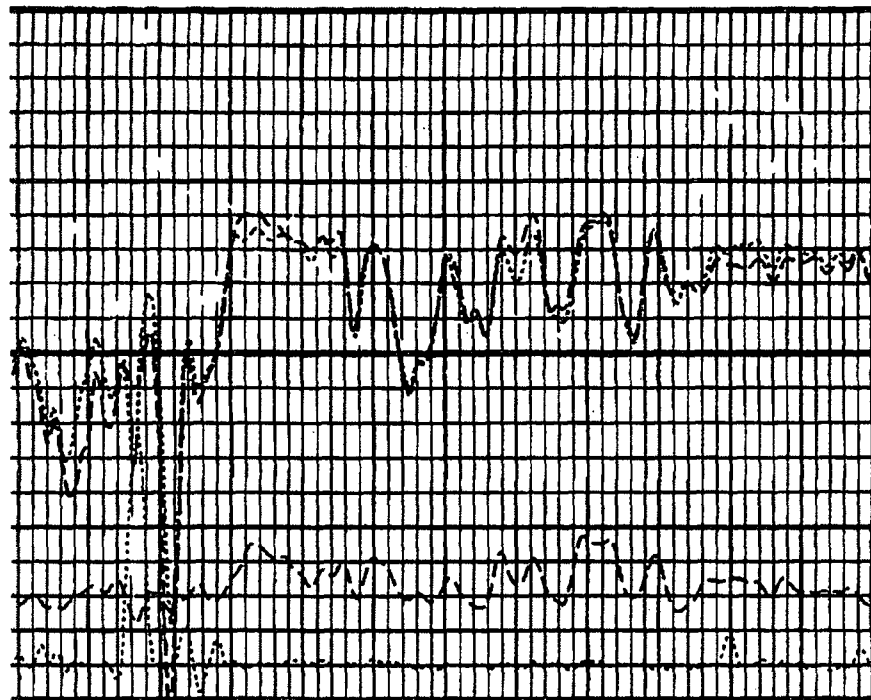
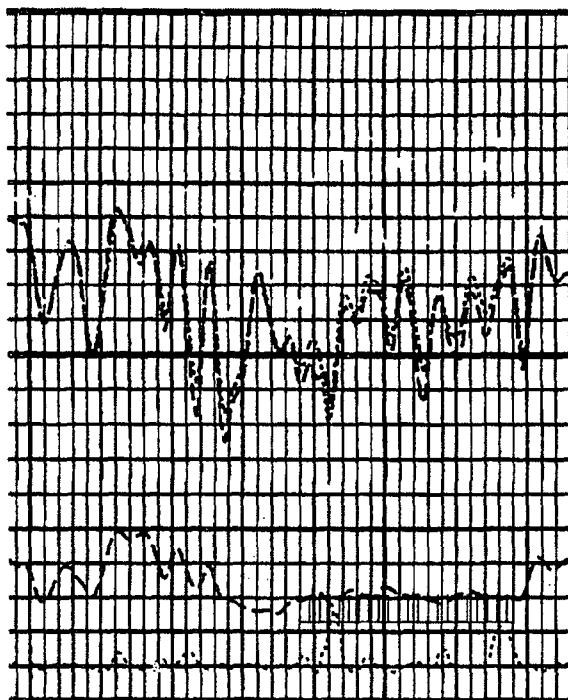


∞ ∞ ∞

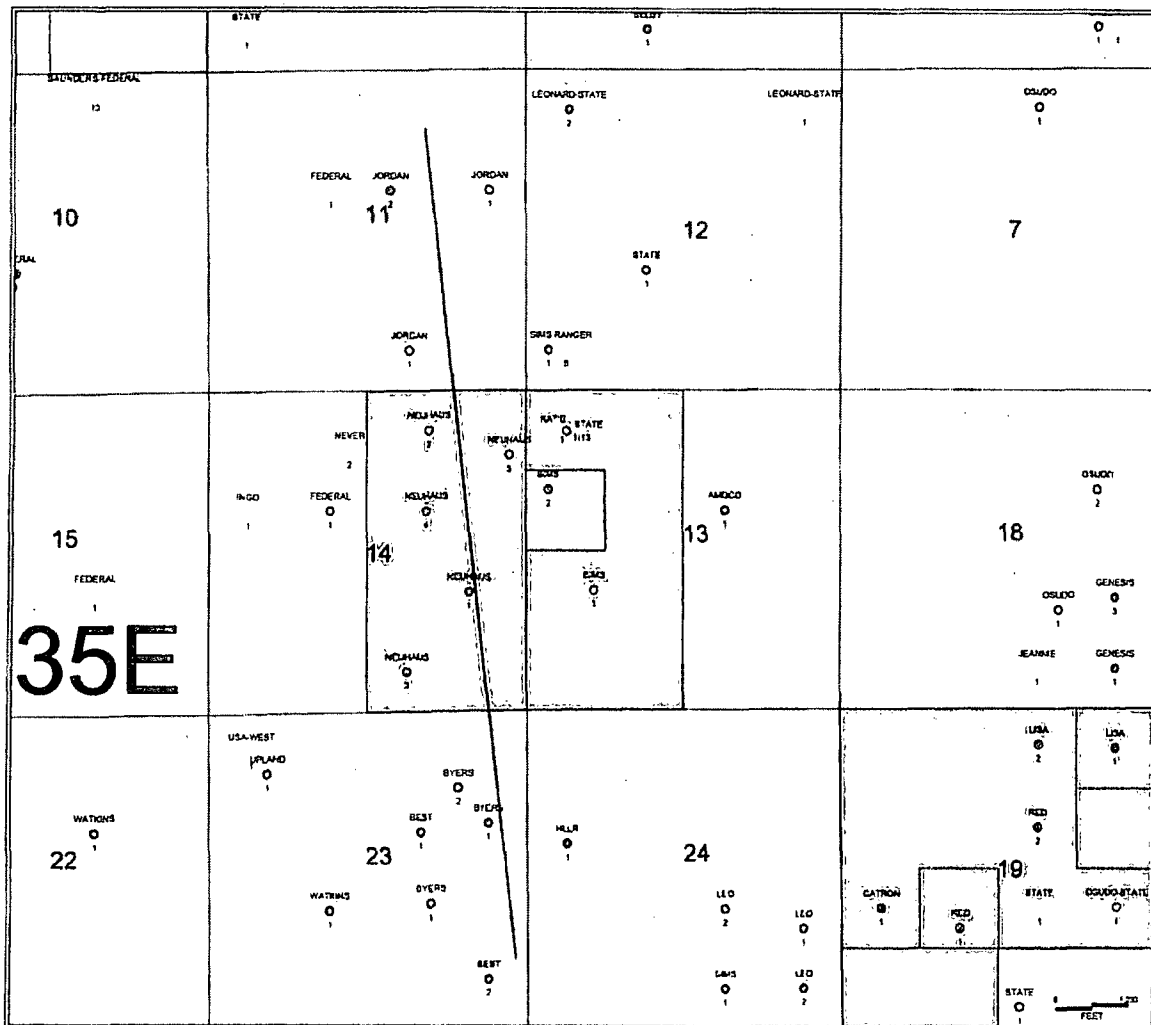


∞ ∞ ∞ ∞ ∞





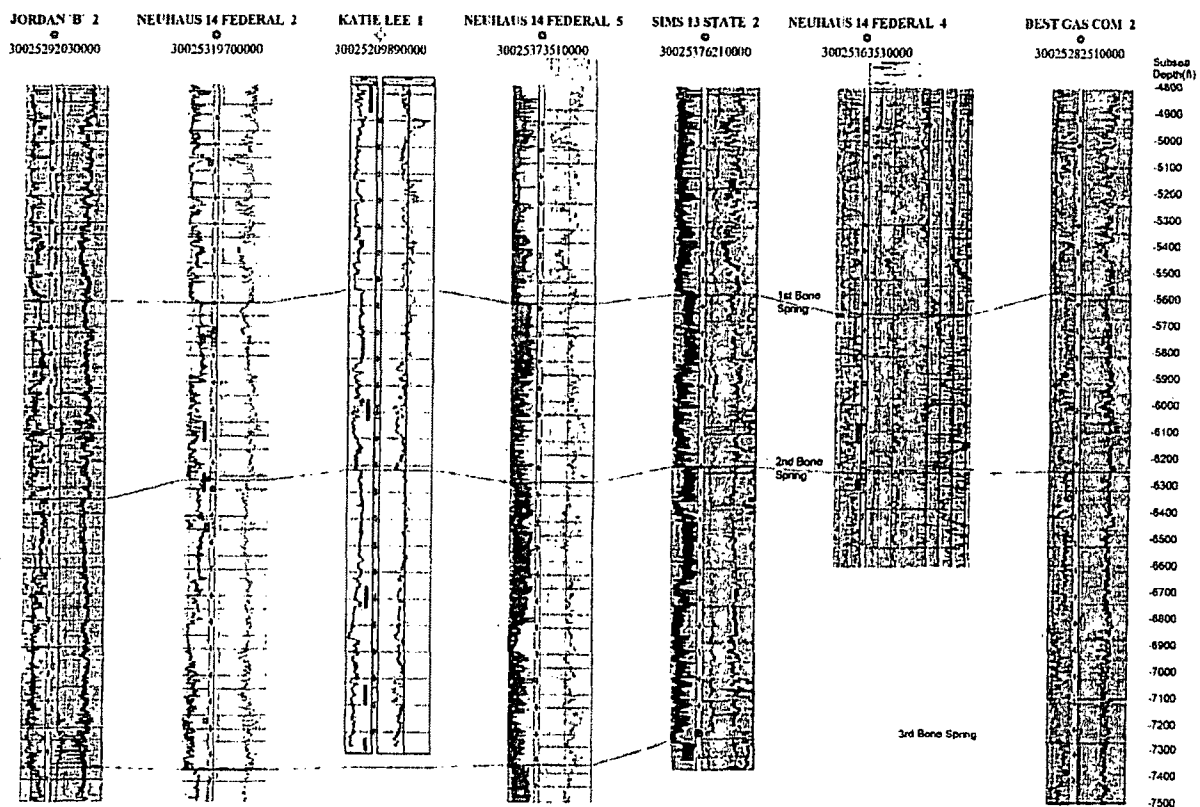
Location Map:





Cross Section:

Structure: Bone Spring



\*Active perfs are in Lime Green, Proposed perfs are in Pink, and Mudlog shows/DST's are in Dark Green.

# Well Bore Diagram:

Last Updated: 5/20/2013

## Current Wellbore Schematic

WELL (PN): NEUHAUS 14 FEDERAL 4(CVX) (890895)  
FIELD OFFICE: HOBBS  
FIELD: FEATHERSTONE B, SPRING EAST  
STATE / COUNTY: NEW MEXICO / LEA  
LOCATION: SEC 14-20S-35E, 1980 FNL & 1650 FEL  
ROUTE: HOB-NM-ROUTE 11- ADAM FLORES  
ELEVATION: GL: 3,671.0 KB: 3,686.0 KB Height: 15.0  
DEPTHS: TD: 10,288.0

API #: 3002536353  
Serial #:  
SPUD DATE: 8/24/2003  
RIG RELEASE: 9/20/2003  
1ST SALES GAS:  
1ST SALES OIL: 10/13/2003  
Current Status: SHUTIN

