

WELL: N M Federal "C" #1 LEASE#: 011686 SPUD: 1/18/1977
 COUNTY: Lea APL: 30-025-25430 LOCATION: 1980' FSL & 660' FEL
 STATE: New Mexico FIELD: Salt Lake South 4-21S-32E
 FORMATION: Morrow
 TD: 14,125'
 PBTD: 13,996' ELEVATION: 3,735' KB 18' above GL

CASING RECORD

O.D.	WT./FT.	GRADE	THD	TOP	BTM	NO. JTS.	BIT SZ.	SK CMT.	TOP CMT.
13.375"	48.00#	H40	ST&C	0'		9	17.500"	650	Surface
13.375"	54.50#	K55	ST&C		468'	2	17.500"		
9.625"	47.00#	N80	LT&C	0'		150	12.250"	2325	Surface
9.625"	53.50#	N80	LT&C		5,572'		12.250"		
5.500"	20.00#	N80	LT&C & BTC	0'		355	7.875"	875	9,310'
5.500"	17.00#	N80			14,124'		7.875"		

TUBING

O.D.	WT./FT.	GRADE	THD	TOP	BTM	NO. JTS.	BIT SZ.
2.875"	6.40#	N80	EUE	0'	13,765'		

PERFORMANCE RECORD

DATE	TOP	BOTTOM	SPF	ZONE	STATUS
04/12/77	13,688'	13,691'		Morrow	Open
04/12/77	13,697'	13,699'		Morrow	Open
04/12/77	13,737'	13,739'		Morrow	Open
04/12/77	13,753'	13,769'		Morrow	Open
04/12/77	13,847'	13,850'		Morrow	Open
04/12/77	13,857'	13,859'		Morrow	Open
04/12/77	13,900'	13,912'		Morrow	Open
04/12/77	13,929'	13,933'		Morrow	Open
04/12/77	13,939'	13,943'		Morrow	Open
04/12/77	13,989'	13,996'		Morrow	Open
04/12/77	14,008'	14,011'		Morrow	Open
04/12/77	14,023'	14,027'		Morrow	Open
11/30/93	13,753'	13,769'	2	Morrow	Open re-shot
11/30/93	13,686'	13,700'	2	Morrow	Open re-shot
11/30/93	13,652'	13,662'	2	Morrow	Open New

REMARKS

4/24/77 Acidized perfs 1/13,688'-14,011' with 6000 gals 7.5% E2 flow acid and 90 ball sealers w/1225 SCF CO2/bbl. Had some ball action but did not ball out.
 12/07/93 TOOH and replace bad tbg. Pumped 4000 gals 7.5% Mod-101 w/1000 psi on casing (Acid contained 2000 gals methanol and 2% KCL water). 70Q foam using 45 tons CO2. Dropped 100 ball sealers. Some ball action. ISISP=3081.
 11/24/97 Clean out
 12/98 Salt cleanout. Put on plunger lift
 01/01/99 RU coil tbg unit. Clean out wellbore to 13,995' using 3% KCL & N2 Foam. Salt plugs in tbg.
 07/27/00 Remove salt t/btg. FTP 140 psi, SICP 200 psi, catch plunger, plunger btm 1/2 covered w/paraffin. Pump 7 bbl 4% KCL / 5 gal soap dwn csg & wait for plunger to fall.
 2002 Remove salt t/btg (5/02, 6/02 & 11/02)
 2003 Remove salt t/btg (3/03, 5/03, 8/03)
 2004 Remove salt t/btg (9/04)

Tubing Detail as of 11/11/09:

KB: 18'
 438 JTS @ 13915'
 PKR without rubbers- 344 JTS @ 10916'

CAPACITIES

TUBULAR Cap.	Bbl/ft	Ft3/ft	
	Tubing	0.00579	0.03253
Casing (5.5" 17#)	0.02324	0.13050	
Casing (5.5" 20#)	0.02217	0.12450	
Annular Cap.	Bbl/ft	Ft3/ft	
	Tubing x Casing(17#)	0.01521	0.08540
	Tubing x Casing(20#)	0.01414	0.07940
	Casing x Hole	0.03090	0.17330

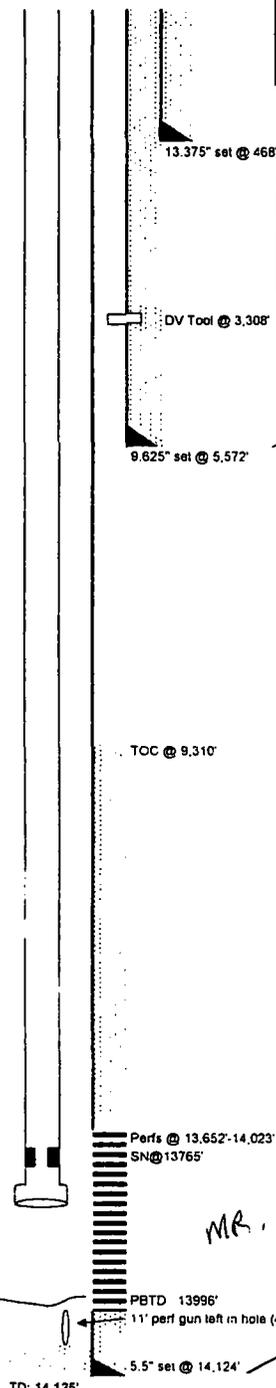
TUBULAR GOODS PERFORMANCE

Material	Tensile (lbs)	Burst (psi)	Collapse (psi)	ID (in)	Drift (in)
13.375" 48# H40 ST&C	547,000	2,730	1,130	12.615	12.459
13.375" 54.5# K55 ST&C	322,000	1,730	770	12.715	12.559
9.625" 47# N80 LT&C	905,000	6,670	4,750	8.681	8.525
9.625" 53.5# N80 LT&C	1,062,000	7,930	6,620	8.535	8.379
5.5" 20# N80 LT&C & BTC	428,000	9,190	8,830	4.778	4.653
5.5" 17# N80	348,000	7,740	6,280	4.892	4.767
2.875" 6.4# N80 EUE	144,960	10,570	11,160	2.441	2.347

*Safety Factor Not Included

Restler 1392
Blsa 14 3244
Yates 3358
C-Perf 3530
De L. 5610/185 8600
WC 11060
CYN 12400
ST 12605
AT 12750
PKR 13544
LTKR 13962

32.5059814
-103.6733017

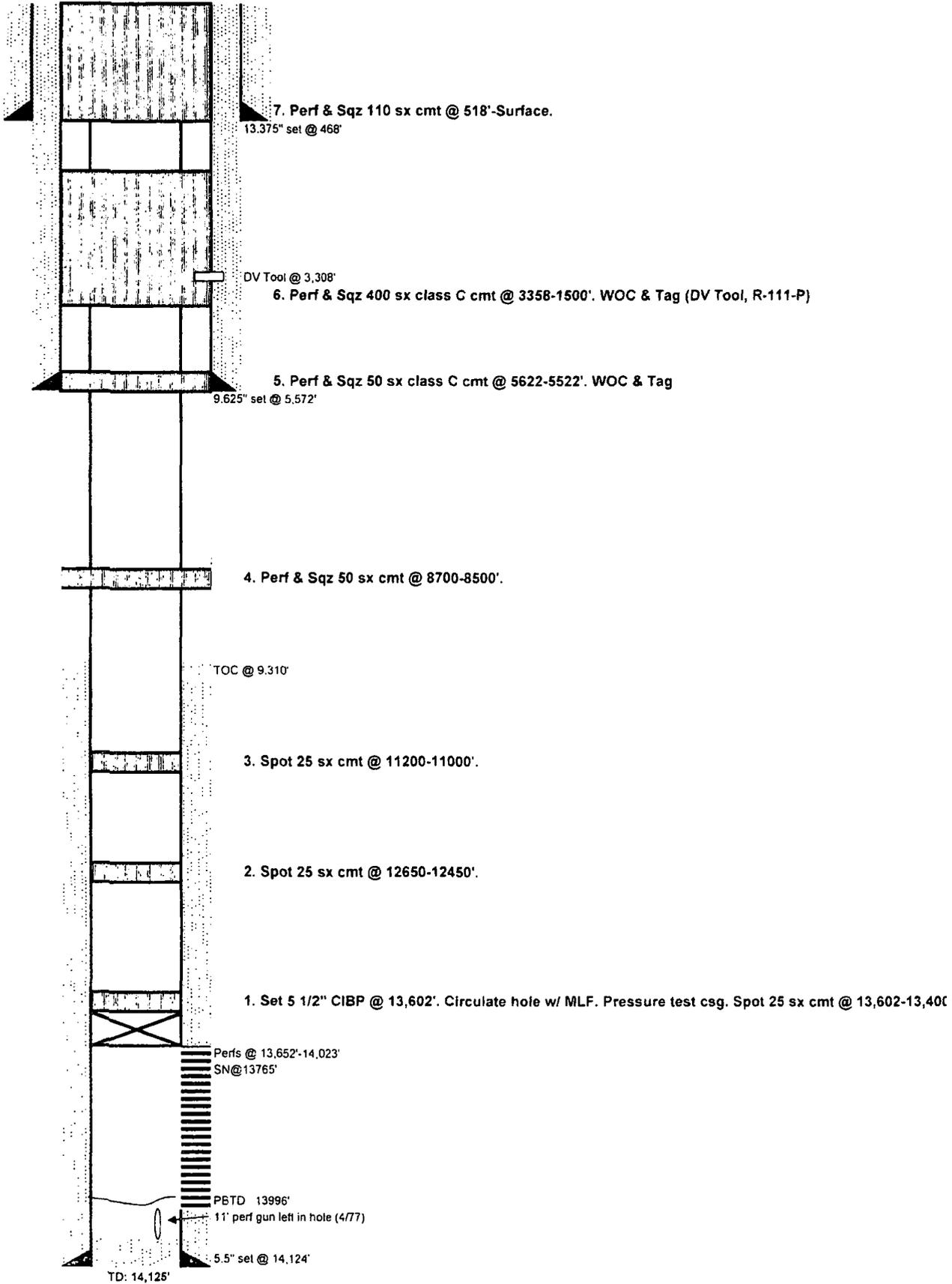


MISCELLANEOUS

SRC Wt%: 75.00% BHT:

Engineer: Eric Outlaw
 Office#: 918-591-1929
 Fax#:
 Prepared By: Sarah White
 Date: 10-21-97
 Updated: 8/16/00 jdb
 11/16/09 GLS

WELL:	N M Federal "C" #1	LEASE#:	011686	SPUD:	1/18/1977
COUNTY:	Lea	API:	30-025-25430	LOCATION:	1980' FSL & 660' FEL
STATE:	New Mexico	FIELD:	Salt Lake South		4-21S-32E
		FORMATION:	Morrow		
TD:	14,125'				
PBTD:	13,996'	ELEVATION:	3,735' KB		18' above GL



**BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972**

**Permanent Abandonment of Federal Wells
Conditions of Approval (LPC Habitat)**

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within ninety (90) days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

The rig used for the plugging procedure cannot be released and moved off without the prior approval of the authorized officer. Failure to do so may result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of **brine** water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient. **Before pumping or bailing cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.**

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

6. Below Ground Level Cap (Lesser Prairie-Chicken Habitat): All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). **The BLM is to be notified a minimum of 4 hours prior to the wellhead being cut off to verify that cement is to surface in the casing and all annuluses. Wellhead cut off shall commence within ten (10) calendar days of the well being plugged. If the cut off cannot be done by the 10th day, the BLM is to be contacted with justification to receive an extension for completing the cut off.** Upon the plugging and subsequent abandonment of wells that are located in lesser prairie-chicken habitat, the casings shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be covered with a metal plate at least ¼ inch thick and welded in place. A weep hole shall be left in the plate and/or casing.

NMOCD also requires the operator to notify NMOCD when this type of dry hole marker is used. This can be done on the subsequent report of abandonment which is submitted to the BLM after the well is plugged. State that a below ground cap was installed as required in the COA's from the BLM.

7. Subsequent Plugging Reporting: Within 30 days after plugging work is completed, file one original and three copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date well was plugged.**

8. Trash: All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration will be required. See attached reclamation objectives.

Timing Limitation Stipulation/ Condition of Approval for Lesser Prairie-Chicken:

From March 1st through June 15th annually, abandonment activities will be allowed except between the hours from 3:00 am and 9:00 am. Normal vehicle use on existing roads will not be restricted