Billy W. Nievar P.E.
Chaparral Energy LLC
701 Cedar Lake Blvd
Oklahoma City, Oklahoma 73114

February 27, 2014

30-025-12302
WDQSU No. 37
Based on information
Provide by operator,
Packer within 100 ft of
top perf. 3/3/25/14

RECEIVED OCD
2014 MAR 10 P 1:56

Mr. Phillip Goetz
Oil Conservation Division
Energy Minerals and
Natural Resources Department
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

RE: Letter of Violation Dated (10-Oct-13)

Dear Mr. Goetz:

Chaparral Energy received the referenced letter of violation and has prepared a response for parts of the letter. This letter deals with the Packer setting depths for West Dollarhide Queen Sand Unit (WDQSU) Wells No. 021, 036, 037, 151 and 133.

West Dollarhide Queen Sand Unit No. 021. M-30-24S-38E 30-025-12270

Packer Setting depth 106' above top perf. ***Operator in Violation of NMOCD Permit order WFX-570* Operator must seek Approval from Phillip Goetz – OCD Santa Fe Prior to setting Packer more than 100' above top perf***

Response: In February 1997 this well was placed in Temporary Abandonment Status by setting a CIBP at 3,600'. In April 2010 Chaparral was required to remove the well from TA status. Usually it takes two to three days of work to remove the CIBP and run the injection tubing and packer. Due to down hole well conditions this well took 8 days of time. We had difficulty in locating a packer seat. Well records show this well has 7.0" casing cemented up to 720' and 4-1/2" casing cemented to surface inside the 7.0" casing. On April 20, 2010 we had set the packer at 3,583' and did a 500 psi annulus pretest. On April 21, 2010 we placed packer fluid in the annulus flanged up the well and the annulus leaked. We tested at 61' higher and had a leak. Pulled 10' higher and it held. We had to use tubing subs to keep the packer at this depth. This ended up with the packer at 3,560'. The top perforation is at 3,666'. The annulus tested ok on April 21, 2010 with the packer set at 3,560'. Due to the well conditions Chaparral requests that NMOCD grant approval of setting the injection packer more than 100' above the top perforation. See (Attachment A) attached well bore schematic and Well History.

West Dollarhide Queen Sand Unit No. 036. I-31-24S-38E 30-025-12288

Packer Setting depth 132' above top perf. ***Operator in Violation of NMOCD Permit order WFX-570* Operator must seek Approval from Phillip Goetz – OCD Santa Fe Prior to setting Packer more than 100' above top perf***

Response: It appears the previous wellbore schematic with a packer setting depth of 3,442' is in error. The correct setting depth should be 3,478.25'.

This well was drilled and completed in November 1952. 7.0" casing was set at 3,670' and cemented with 1,400 sx cement. In 1988 the well was deepened to 3,969', 4-1/2" casing was then run and cemented to surface at 3,950'. After the workover the top perforation was placed at 3,574'. When the well was initially placed on injection in 1988 the injection packer was placed at 3,472'. In a workover conducted by Oxy in March 1993 the packer was set with 113 joints at 3511.08. Chaparral has worked on the well one time since it was placed on injection. In June 2008 a tubing leak developed in the injection string. Thus a workover was required to repair the well. During the workover the 4-1/2" casing collapsed at the surface, right under the wellhead. The 4-1/2", 7.0" and 9-5/8" casings were all repaired during the workover. One joint of injection tubing was removed that had a hole in the tubing. 112 jts injection tubing and the packer were run back into the well and set at 3,478'. This places the packer 96' above the top injection perforation.

This setting depth was determined after a diligent search of the well file. A tubing detail of the injection tubing was located for the March 1993 workover conducted by Oxy. From this information and the workover conducted by Chaparral in 2008 we were able to determine the proper setting depth of the packer. The depth was determined by averaging the joint tally as listed in the Oxy March 25, 1993 workover report. Thus using an average of 30.95' for each joint of tubing and having one joint removed. Chaparral ran 112 jts in the well on June 6, 2008. Then adding the length of the Seating Nipple 1.10' the Packer of 2.75' and Kelly bushing depth of 8.00' totals up to 3,478.25'. This depth places the packer within 96' of the top perforation. See (Attachment B) attached well bore schematic and Well History. Thus with this additional information WDQSU No. 36 should not be in Violation of NMOCD Permit Order WFX-570.

West Dollarhide Queen Sand Unit No. 037. L-32-24S-38E 30-025-12302

Packer Setting depth 117' above top perf. ***Operator in Violation of NMOCD Permit order WFX-570* Operator must seek Approval from Phillip Goetz – OCD Santa Fe Prior to setting Packer more than 100' above top perf***

Response: This well was initially drilled and completed in April and May of 1953. 7.0" casing was set at 3,662' and cemented with 200 sx cement. In March 1974 the well was plugged and abandoned. In

March 1981 the well was washed down to 1313' and the well replugged. In August 1989 the well was reentered and deepened to 3,900', 4-1/2" casing was then run and cemented to surface at 3,900'. After the workover the top perforation was set placed at 3,570'. In May 1997 a CIBP was set in the 4-1/2" casing at 3,690'. The last data in the well file indicates the injection packer is set at 3,494'. This places the packer only 76' above the top injection perforation. It appears the Chaparral wellbore schematic is in error. An updated wellbore schematic is attached see (Attachment C).

West Dollarhide Queen Sand Unit No. 151. M-29-24S-38E 30-025-30306

Packer Setting depth 119' above top perf. ***Operator in Violation of NMOCD Permit order WFX-570* Operator must seek Approval from Phillip Goetz – OCD Santa Fe Prior to setting Packer more than 100' above top perf***

RESPONSE: This well was drilled by Sirgo Operating Inc. The well was spud on July 24, 1989. The well was drilled to a TD of 3,940'. On July 29, 1989 5-1/2" casing was run and set at 3,940' and cemented to surface with 1000 sx of cement. On August 14, 1989 2-3/8" injection tubing was run in the well and a packer was set at 3,537.8'. Since that time the well has not been pulled or worked on. This packer has been in this position before Chaparral became operator of the WDQSU in November 1, 2003.

It is possible to perform a workover and remove the tubing and packer. Chaparral could attempt to find a packer seat 20' deeper than the packer is located at however, experience in the field has taught us that corrosion can be a problem and could make it difficult in locating a packer seat at a deeper depth.

Due to the well conditions Chaparral requests that NMOCD grant approval of setting the injection packer more than 100' above the top perforation. See (Attachment D) attached well bore schematic and Well History.

West Dollarhide Queen Sand Unit No. 133. D-31-24S-38E 30-025-30355

LAST INJECTION 12/2012: SHUT IN/TA EXPIRED 2007; NO REPORT ON FILE TO DETERMINE STATUS CHANGE OF WELL; TA'D 2006 TBG/PKR IN HOLE; ***Operator in Violation of NMOCD Rule 19.15.25.12 (APPROVED TEMPORARY ABANDONMENT) ***** UPON WORKOVER OPERATOR MUST SET PACKER ACCORDING TO OCD PERMIT WFX-570 – NOTE – IF PACKER CANNOT BE SET ACORDINGLY, OPERATOR MUST CONTACT OCD SANTA FE PHILLIP FOR PACKER SETTING APPROVAL.

RESPONSE: The WDQSU No. 133 was spud on February 3, 1990. 5-1/2" casing was run and cemented at 3,950' 850sx. Cement did not circulate. 1,036' of 1" tubing was run outside of the 5-1/2" casing and Cmt'd to surface w/170 sx. The well was completed in February 1990 as an injection well with the packer set at 3,558.04. The top perf is at 3,678'. This places the packer 119' above the top perforation. From Chaparrals records it appears that once the well was placed on injection in February 1990 it has

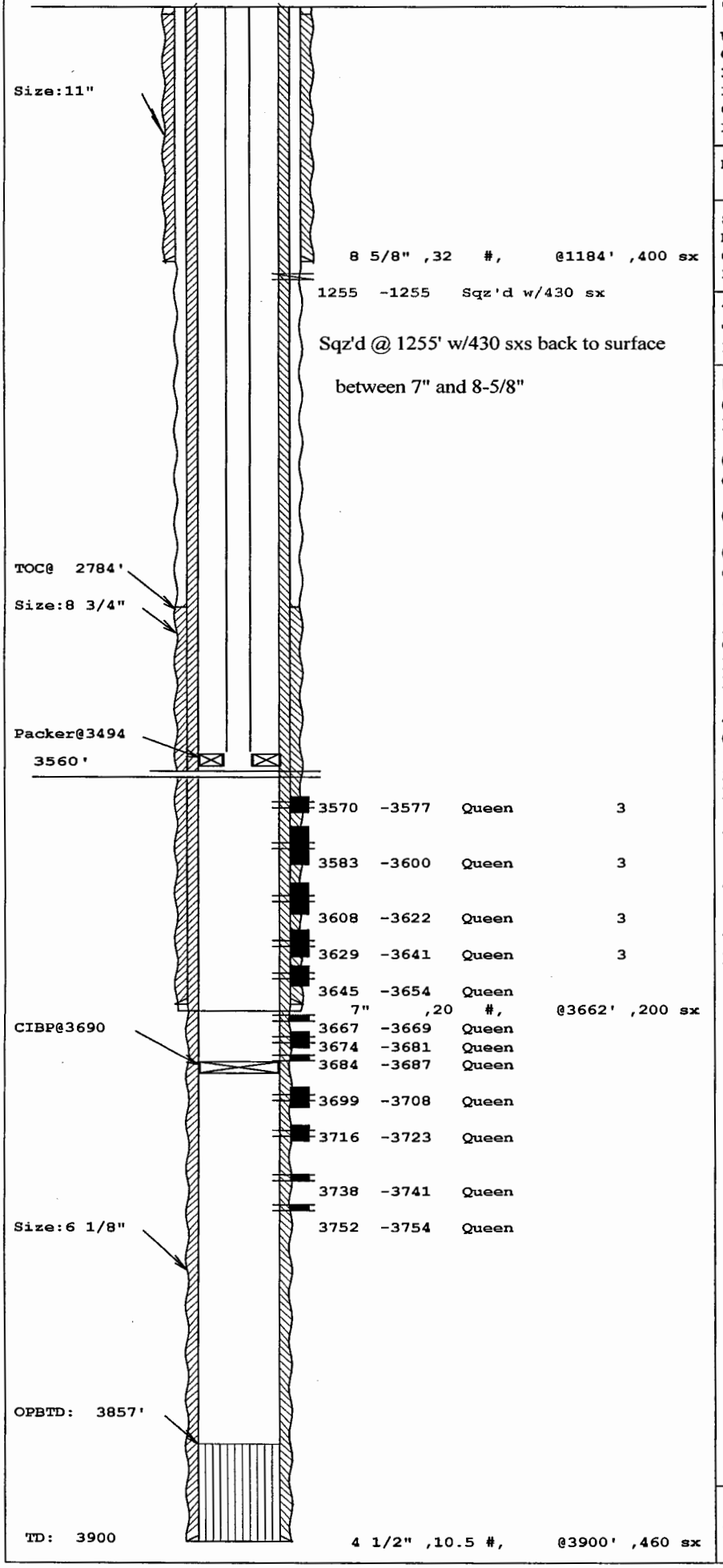
never been pulled apart. Chaparral took over operations of the WDQSU on November 1, 2003. The well was placed on Temporary Abandonment Status from Jan 24, 2007 to Jan 24, 2008. Chaparral has tested the flow line to the well and it is in working condition. Chaparral has also noticed that the well appears to have a tubing leak. Chaparral is preparing 3160-5 forms for the BLM to repair this well. During the workover Chaparral will make an attempt to set the packer within 100' of the top perforation, test the annulus and see if the annulus will hold. If the annulus will not hold due to rough casing within 100' of the top perforation Chaparral will have to move the packer to a location where the annulus will hold. Chaparral will not know this until work begins on the well. After the well is repaired and the Mechanical Integrity Testing is complete and approved Chaparral would like to return the well to active injection. See (Attachment E) attached well bore schematic and Well History.

The five question and response scenarios listed above deal directly with the letter of violation referenced above. Hopefully this information will successfully answer the questions raised in the letter of violation. If you have further questions please feel free to contact me at 405-426-4040. Also a response to Chaparral from the State of New Mexico is requested regarding these responses.

Sincerely,

Billy W. Nievar

Billy W. Nievar P.E.



Chaparral Energy, L.L.C.

Well: West Dollarhide QSU ,#37 ,4087.01
Operator: CELLC
Location: 2310' FSL & 330' FWL, Lea Co., N
Legal: Sec. 32-24S-38E
County: Lea, NM
LAT/Long: /

Dir:

Spud Date: 04/06/53
Drilling Finished:
Completion Date: 05/11/53
First Production:

TUBING #1:

Type	#Jts	Size	Wt#/f	Grade	Set@
IPC		2-3/8	4.7	J-55	3453

HISTORY:

04-06-1953: Spud as Mexico "J" #8 by Skelly. TD 3,662'

05-11-1953: Completed Open Hole 3,662'- 3,770'. TOC of 7.0" @2,784' by Cal.

03-25-1974: Well P&A'd by Getty Oil

02-26-1981: Well Re-plugged by Getty oil. Perf 7.0" casing at 1255' and sqz with 175 sx to surface.

8-15-1989: Ren-entered by Sirgo-Collier, Deepened to 3,900'. Ran 4-1/2" liner from 3,900' to surface. Cmt'd w/ 460 sx, Cmt Circ. to surface. Perfs 3570-3641 Acidized w/ 3200 gal 15% NEFE. Perfs 3674-3754 Acidized w/3800 gal 15% NEFE

4-22-1993: Oxy added Perfs. 3645-3654, and 3667-3669 (26-holes), Acidized wiht 1750 gal 15% Hcl.

5-16-1997: Set CIBP at 3690', Acidized in 2 Stages w/ 2500 gal 7-1/2% HCL/35 HF acid.

8-5-1999: Acidize with 500 gal 15% NEFE. Flush with 16 bbls of fresh water.

4-6-2010: Acidize with 500 gal 15% NEFE. Flush with 15 bbls of produced water.

7-13-2010: Acidize with 500 gal 15% NEFE. Flush with 25 bbls of produced water.

Attachment C

Input by: Traci-BWN
Approved by:
Last Update: 01/29/14

Well Schematic and History

Lease: WDQU Well: 37 Field: Dollarhide Queen

Location: 2310' From South Line and 330' From West Line

Unit L, Section 32 - T24S - R38E County: Lea State: New Mexico

API No.: _____

Spud Date: _____

Compl. Date: 9/1/1989

Attachment C

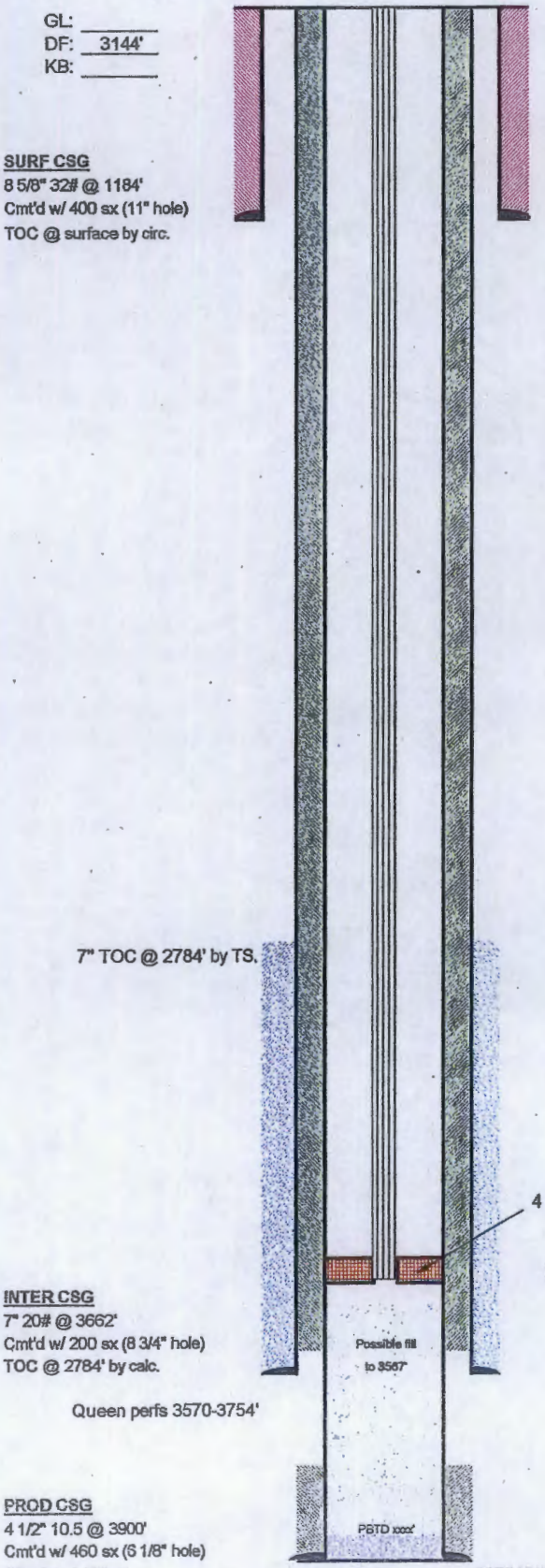
GL: _____

DF: 3144'

KB: _____

SURF CSG
8 5/8" 32# @ 1184'
Cmt'd w/ 400 sx (11" hole)
TOC @ surface by circ.

DATE	INITIAL COMPLETION DATA:
5/8/53	Drilled by Skelly as the Mexico "J" #8
	TD 3662', completed OH 3662-3770'
9/10/58	Perf'd 3578-3644' (gross)
3/25/74	Well P&A'd by Getty Oil
2/26/81	Well re-plugged by Getty Oil
	Perf'd 1255', cemented w/ 175 sx.
8/15/89	Re-entered by Sirgo-Collier, deepened to 3900', ran 4-1/2" liner.
	Perf'd 3570-3641'
	Acidized w/ 3200 gal. 15% NEFE
	Perf'd 3674-3754'
	Acidized w/ 3800 gal. 15% NEFE
4/27/93	Perf'd 3645-54', 3667-69' (26 holes) by OXY
	Tried to acidize new perfs, communicated, moved pkr. to 3502', acidized w/ 1750 gal. 15%
	AIR 4.2 BPM, Max 2100#, ISIP 1300#
5/16/97	Set CIBP @ 3690'. Acidized in 2 stages w/ 2500 gal. 7-1/2% HCl/35 HF acid.
	AIR 5 BPM, Max 3000#, ISIP 1200#
	Well backflowed 1-1/2 BPM w/ 5% oil



INTER CSG
7" 20# @ 3662'
Cmt'd w/ 200 sx (8 3/4" hole)
TOC @ 2784' by calc.

Queen perfs 3570-3754'

PROD CSG
4 1/2" 10.5 @ 3900'
Cmt'd w/ 460 sx (6 1/8" hole)
Circulated 130 sx.

Note: Perforations:

3570-77'	Zone 1
3583-3600'	Zone 2
3608-22'	Zone 3
3629-41'	Zone 4
3645-54'	Zone 5
3667-69'	Zone 6
3674-81'	Zone 7
3684-87'	Zone 7
3699-3708'	Zone 8
3716-23'	Zone 8
3738-41'	Zone 10
3752-54'	Zone 10

w/ 3 JSPF

PREPARED BY:JNC

Revised: 9/29/2002

WDQSU #37
Sec. 32-24S-38E
Lea Co., NM

Attachment C

WELL HISTORY

03/25/74	Pulled rods & tbg. Set CIBP @ 3527'. Spotted 25 sxs cmt plug 3385'-3515', 25 sxs cmt plug 2600'-2730', 100 sxs cmt plug @ 992'-1442' & 10 sxs cmt plug 9'-62'. Installed dry hole marker. Note: All intervals not cmtd were filled w/10.2# mud. No csg was pulled. Well P&A'd.
02/26/81	RU Baber plugging unit. Cut cap off casing. Installed BOP. Drilled out 4' cmt in top. Water came up outside 8-5/8". Ran 189' 2-1/2 tubing with 6" bit and circ outside 8-5/8". POB ran 7" packer on 1st joint. Set and had communication. Circ with 2 jts of pipe and 150#. Circ with 189' and had 600# pressure with communication. POB.
02/27/81	Dug out around 8-5/8 casing, could not find leak. Ran 4 joints 2-7/8 tubing. Pumped 190 sx Class C 2% CaCl. Filled up hole around 8-5/8 casing.
03/02/81	Run 6-1/4 bit, tagged cement, 10' at 217. Ran to 980'. Circ out heavy mud, wet to 1300'.
03/03/81	Circ mud to 1313'. Pulled bit. Perfd 4 holes at 1255, ran packer, set at 1137. Broke circ 5 BPM. Pulled packer, ran cmt retainer, Baker set at 1130'. Would not circ 1/4 BPM at 500#.
03/04/81	Knox acidized perfs 1250 thru cement retainer at 1130' with 250 gals 15% acid, 3 BPM at 800#. Cemented with 175 sx Class C with 2% CaCl. Displaced to 1130'.
03/05/81	Pulled tubing to 1125'. Cemented with 225 sx class C with 2% CaCl to surface. Pulled tubing. Filled 7" with cement, squeezed 30 sx.
08/15/89	Re-entered by Sirgo-Collier, deepened to 3900', ran 4-1/2" liner to surface. Perf'd 3570'-3641'. Acidized w/3200 gal 15% NEFE. Perf'd 3674-3754'. Acidized w/3800 gal 15% NEFE.
04/24/93	Perf'd 3645-54', 3667-69' by (OXY). Acidized w/1750 gal 15% NEFE. AIR 4.2 BMP Max 2100# 1300#.
06/06/94	MIRU. ND WH & NU BOP. POH w/pkr & tbg. RIH w/Baker AD-1 pkr & 2 3/8" tbg, test to 5000#. Replaced 1 jt tbg. Circ hole w/pkr fluid. Set pkr @ 3494'. ND BOP & Nu WH. Test csg to 350#. RD. Put well back on injection @ 290 BWPD @ 690#.
08/11/94	MIRU. ND WH & NU BOP. POH w/pkr & tbg. RIH w/Baker AD-1 pkr & 2 3/8" tbg, test to 5000#. Replaced 1 tbg collar. Circ hole w/pkr fluid. Set pkr @ 3494'. ND BOP & NU WH. Press csg to 360# for 15 min, held ok. RD. Put well back on injection.
07/18/95	MIRU. ND WH & NU BOP. Rel pkr. POH w/tbg & pkr. RIH w/pkr & 2 3/8" tbg. Test tbg to 5000#, tested ok. Circ w/pkr fluid. Set pkr & test to 420#, held ok. RD. Put well back on injection.
05/16/97	Set CIBP @ 3690'. Acidized in 2 stages w/2500 gal 7-1/2% HCL/35 HF acid. AIR 5 BPM, Max 3000#, ISIP 1200#. Well backflowed 1-1/2 BPM w/5% oil.
04/06/10	TP 1200#, CP 0#. RU Rising Star to acidize well. Establish rate of .7 BPM @ 1620#. Pmp 500 gals 15% NE FE HCL acid, increase rate to 1.5 BPM @ 1910#. Flush w/15 bbls PW. ISIP 1290#, 5 mins 1240#. RD Rising Star. Put WH together & open valves. TP 1220#. MO Rising Star.
07/13/10	TP 1100#, CP 0#. MIRU. Pmp 500 gals 15% HCL & flush w/25 bbls produced water @ average 1 BPM @ 1550#. ISIP 1400#, 5 mins 1250#, 10 mins 1200#. RD & put back through injection system.