

RECEIVED

OCT -9 '89

O. C. D.
ARTESIA, OFFICE

DATE: October 6, 1989

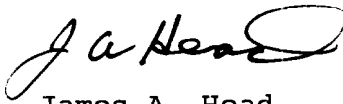
TO: Johnny Robinson
Oil Conservation Division
Drawer DD
Artesia, New Mexico 88210

FROM: James A. Head
Texaco Producing Inc.
PO Box 730
Hobbs, New Mexico 88240

SUBJECT: Skelly Unit No. 34

On 7-17-89 the subject well failed a mechanical integrity test performed by request of your office. A workover to correct the problem has been written and attached with this letter. Presently the well is being bled down in order to perform the required work. The most recent test on 10-5-89 showed the well to be flowing 350 BPD at 525 psi.

On 10-6-89 Mike Williams of your office gave verbal permission by telephone conversation for an extension to 11-1-89 to perform the required work. Your office will be notified on the progress of this well and when the proposed work will commence. Thank you for your cooperation.



James A. Head

WTL

NEW MEXICO OIL CONSERVATION DIVISION
CASING--BRADENHEAD TEST

OPERATOR: TEXACO PRODUCING CO.
POOL: 6B JACKSON Y SR QN GB SA
LEASE NAME: SKELLY UNIT WELL NO 34 UNIT LTR N
FOOTAGE N/S 660/S SECTION 14 TOWNSHIP 17S RANGE 31E
FOOTAGE E/W 1980/W PRESS LMT 2000 TYPE LEASE F TYPE WELL W
ORDER NO./DATE 4717-A 1/78 DATE INJ. BEGAN NA

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TEST DATE	4/28/87	TEST TYPE	BH	PASS/FAIL	PASS	
OPERATOR REP:	0			OCD REP	JOHN R	
CASING	SIZE	SET AT TOP	CMT	CEMENTED	PRESSURE	REMARKS
SURFACE	8 5/8	750	0	100	0	DRIPS
INTERM	0	0	0	0	0	0
PROD	5 1/2	3737	0	380	0	0
LINER	0	0	0	0		
TUBING	2 3/8	0	0		1900	0
REMARKS:	OK					
REPAIR LETTER DATE:		0 DATE REPAIRED		0 SNC		0

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TEST DATE	APRIL 25	AT TEST TYPE	BH	PASS/FAIL	PASS	
OPERATOR REP:	0			OCD REP	MIKE S	
CASING	SIZE	SET AT TOP	CMT	CEMENTED	PRESSURE	REMARKS
SURFACE	8 5/8	750	0	100	0	0
INTERM	0	0	0	0	0	0
PROD	5 1/2	3737	0	380	0	0
LINER	0	0	0	0		
TUBING	2 3/8	0	0		1700	0
REMARKS:	OK					
REPAIR LETTER DATE:		0 DATE REPAIRED		0 SNC		0

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TEST DATE/TIME	7/17/89 @ 8 AM	TEST TYPE	MIT	PASS/FAIL	FAIL	
OPERATOR REP:		OCD REP	DM AS			
CASING	SIZE	SET AT TOP	CMT	CEMENTED	PRESSURE	REMARKS
SURFACE	8 5/8	750	0	100		
INTERM	0	0	0	0	0	
PROD	5 1/2	3737	0	380		
LINER	0	0	0	0	0	
TUBING	2 3/8	0	0		1750	
REPAIR LETTER DATE:		DATE REPAIRED			SNC	

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REMARKS: Active

Well would not pump up. Used 10 bbls started running out of bradenhead.

Lease SKELLY UNIT Well No. 34 Date 8-18-89
Pool GRAYBURG - JACKSON County EDDY Tx. Work Int. 100%
All depths measured from DF or 4 ft. from ground level. State NEW MEXICO
TX. Comp. Date 9-16-61 @ T.D. 3850' I.P. Oil 189 Water 0 Gas - MC
GOR - Hrs. 24 Pump. (Flow) Present T.D. 3831' Elevation 3893' D

DESCRIPTION OF PROSPECTIVE OR PAY ZONES

Name or Type of Zone	Top	Base	Remarks
GRAYBURG - JACKSON	3202	3850	

CASING AND LINER RECORD

Size	Weight	Grade	Set At	Sacks Cement	Hole Size	Perf.	Remarks
3 7/8"	24#	J-55	750'	100	10"	NONE	CMT. CIRC.
5 1/2"	15.5#	J-55	3737'	380	8 1/4"	3568' - 3716'	152 SHOTS CALC. TOC 1294'
						3286' - 3544'	15PF - 16 SHOTS
						3737' - 3850'	OPEN HOLE

COMPLETION AND REMEDIAL WORK RECORD

Production Test Before						Treatment		Production Test After			
Date	Oil	Water	GOR	Hrs	Type	Amount	From, To	Oil	Water	GOR	Hrs
9-16-61	NEW	COMPLETION			ACID	4300 GALS	3568' 3850'				
3-28-67	5	3	-		2591 BD	9500* SAND	3568' 3850'	189	0	-	24
					ACID	1000 GALS	3286' 3286'				
7-4-67	CONVERT TO INJECTION	GRAYBURG - JACKSON			15000 GALS	15,000* SAND	3286' 3286'	10	50 (LAD)	-	

Remarks: JUNE 1989, INJECTING 84 BWPD @ 1800psi

Present Allow _____ Max. Allow _____ Accum. INJ. 1.7 MMBW AS OF 8-1-89
Accum. Prod. 30,832 as of 8-1-89
Present Test: Oil _____ Water _____ Gas _____ GOR _____ Hrs. _____ Pump. Flow. _____

Choke Size _____ Pressure _____ Tbg Pressure _____

Reasons for Remedial Work: DURING THE PAST NMDCD REQUIRED CASING INTEGRITY TEST, A FLOW DEVELOPED FROM THE 3 7/8" - 5 1/2" CASING ANNULUS. THE NMDCD HAS REQUIRED IMMEDIATE REPAIR OF THE FLOW OR DISCONTINUE WATER INJECTION OPERATIONS. AFTER REVIEWING THE SUBJECT WELL AND THE OFFSET PRODUCTION WELLS, IT APPEARS THAT THE IMPORTANCE OF THE INJECTION WELL REQUIRES A REPAIR OF THE LEAK. Petroleum Engineering Recommendations and Procedure:

- BACK FLOW VALVE
- MIRU PULLING UNIT. INSTALL BOP.
- RELEASE 5 1/2" INJECTION PACKER AND TOH W/ 101 JTS. (3175') OF 2 3/8" TUBING AND PACKER TH W/ CIBP AND SET AT 3190'. LOAD HOLE W/ 2% KCL WATER. TEST CIBP.
- RUN CEMENT BOND AND CASING INSPECTION LOG FROM 3180' TO SURFACE.
- TH W/ PACKER AND TEST CASING TO LOCATE LEAK.
- ESTABLISH RATE THROUGH BRADEN HEAD. TOH W/ TUBING AND PACKER.
(COULD - RUN A DYE FLUID CALIPER TO ESTIMATE ANNULAR VOLUME)

Reviewed and Approved By:

District

Geological

Asst. Dist. Mgr.

Dist. Manager

District Petroleum Engineer

Division

Engineering

Geological

Gen'l. Supt.

Approved

Date

	CASH	MOH	TOTAL	TEXACO
IDC	40,500	-	40,500	40,500
INV.	-	-	-	-
TOTAL	40,500	-	40,500	40,500

JTL 8-21-89

PROD. INC: _____ TX. _____
PAYOUT NMDCD REQUIRED
P.F.I. _____

RECOMMENDED REMEDIAL WORK (CONTINUED)

LEASE: GRAYBURG-JACKSON

WELL NO.: 34

DATE: 8-18-89

AS ILLUSTRATED ON THE ATTACHED PLATS OF THE SKELLY UNIT, THE SUBJECT INJECTION WELL IS LOCATED IN A 5-SPOT PATTERN WITH FOUR ACTIVE PRODUCTION WELLS. THEIR CUMMULATIVE DAILY PRODUCTION IS 18 BOPD WITH 18 BWPD. THE SUBJECT WELL IS THE LARGEST INJECTOR BY VOLUME (84 BWPD @ 1800 PSI) OF ANY OF THE OTHER INJECTION WELLS ACTING ON THESE FOUR ACTIVE PRODUCERS.

AFTER RUNNING A CEMENT BOND LOG, CASING INSPECTION LOG, AND DETERMINING THE LOCATION OF THE LEAK IN THE 5 1/2" CASING, THE APPROPRIATE CORRECTIVE PROCEDURES WILL BE INITIATED.

THE RECOMMENDED WORK SHOULD BE IMPLEMENTED TO:

- 1) BE IN COMPLIANCE WITH NMDOD RULE 702 FOR OPERATION OF INJECTION WELLS.
- 2) PREVENT FURTHER FAILURES DUE TO CASING LEAKS.
- 3) MAINTAIN WATER INJECTION SUPPORT FOR FOUR OFFSET PRODUCERS AVERAGING 18 BOPD WITH 18 BWPD, WHICH IF CEASED WOULD RESULT IN AN ESTIMATED LOSS OF 5 BOPD IN THESE PRODUCERS.

RECOMMENDATIONS AND PROCEDURE CONT.

7. TTH W/ DRILLABLE CEMENT RETAINER, SET RETAINER 75' ABOVE CASING LEAK.
8. SQUEEZE SUFFICIENT CEMENT TO CIRCULATE TO SURFACE THROUGH BRADEN HEAD.
ST. BRADEN HEAD AND SQUEEZE AN ADDITIONAL 50 SXS. INTO LEAK.
Discuss volumes and type of cement w/ Engr. after leak is located.
9. DRILL OUT RETAINER AND CEMENT
10. TEST SQUEEZE TO 1000 PSI. IF NECESSARY RESQUEEZE.
11. DRILL OUT CIBP AND TAG BOTTOM. CLEAN OUT FILL IF NECESSARY. TOH
12. TTH W/ WORKSTRING AND 5 1/2" RETRIEVABLE PACKER, SET PACKER AT 2250'.
LOAD BACKSIDE.
13. ACIDIZE OPEN HOLE SECTION 3737'-3850' AND PERFS 3568'-3716', 3280'-3544'.
W/ GELLED 15% MEE HCL ACID. PUMP AT ± 4 BPM (MAX TP 3500 PSI)
AS FOLLOWS:
A) PUMP 2000 GALS OF ACID
B) PUMP 750 LBS GRADED ROCK SALT IN GELLED BRINE (116/500)
C) PUMP 2500 GAL OF ACID
D) PUMP 750 LBS GRADED ROCK SALT IN GELLED BRINE (ADJUST BASED ON FURTHER)
E) PUMP 3000 GALS OF ACID
F) FLUSH TUBING WITH 50 GAL WATER + SHUT IN 1 1/2 TO 2 HRS.
14. TOH W/ WORKSTRING AND PACKER
15. PERFORATE INJECTION PACKER AND TUBING. SET PACKER AT 3170'. RESUME INJECTION
16. PERFORATE STABILIZER AND TUBING. SET PACKER AT 3170'. RESUME INJECTION

SKELLY UNIT # 34

GRAYBURG - JACKSON

