

Catanach, David

From: John Petty [John.Petty@meritenergy.com]
Sent: Monday, December 20, 2004 2:15 PM
To: Catanach, David
Cc: Beverly Hatfield; John Petty; David Hertel
Subject: Re: Fren/Turner Wells



FRIESSM4.XLS



TA36.xls



TB50.XLS



FREN3.xls



FREN12.XLS



FREN13.XLS



TB44.XLS



FREN2.xls

Mr. Catanach,

Thank you for your reply to my message. Sorry for the delay in getting back with you - I was preparing the diagrams as you requested. I have attached the excel files in this email. Please let me know if you can't open any or all of the files, or if you prefer faxed copies instead.

With regards to the questions on specific wells from your first email, I will attempt to answer them here:

Turner B #50 - The well was squeezed with 120 bbls of cement on 7/22/04. The new top of cement behind the 7" casing is 1365' (see attached schematic).

Turner A #36 - The well was squeezed with 76 bbls of cement on 7/19/04. The new top of cement behind the 7" casing is 1193' (see attached schematic).

Fren Oil Company #3 - A CBL was run on 3/15/04. The log showed that the top of cement behind the 5-1/2" casing was 1800'. This is into the next casing shoe - 7" casing is at 1802' (see attached schematic).

Cedar Lake No 3Y - No work was done on this well because its corresponding injector (Fren Oil Co #1) was found to have bad casing. We have delayed work on both wells, pending the success of the first three injectors (Fren Oil #5 / Fren Oil #25/ Turner B #12).

Please let me know if you require additional information or materials. We're looking forward to evaluating this pilot flood on the Seven Rivers. We believe there is potential to increase field production on a large scale if it's successful.

Thank you,

John Petty
Western Permian Ops Eng
Merit Energy Company
(972) 628-1602 - Office
(972) 960-1252 - Fax

(See attached file: FRIESSM4.XLS) (See attached file: TA36.xls) (See attached file: TB50.XLS) (See attached file: FREN3.xls) (See attached file: FREN12.XLS) (See attached file: FREN13.XLS) (See attached file: TB44.XLS) (See

Catanach, David

From: Catanach, David
Sent: Monday, December 13, 2004 10:20 AM
To: 'john.petty@meritenergy.com'
Subject: Fren/Turner Wells

John,

I got your phone message. I looked at the step rate tests and they look okay. I also reviewed the sundry notices for the well repairs required by WFX-795 and 796. It seems to me that some of the sundry notices don't give all the information on the well repair. For example, the Turner B No. 50 does not give any cementing information. Same for the Turner A No. 36. Also, what did you find on the Fren Oil Company No. 3? Also, was no work done on the Cedar Lake No. 3Y?

Could you please prepare revised wellbore diagrams for the wells that you were required to repair. These diagrams should reflect the work performed, and should indicate cement tops.

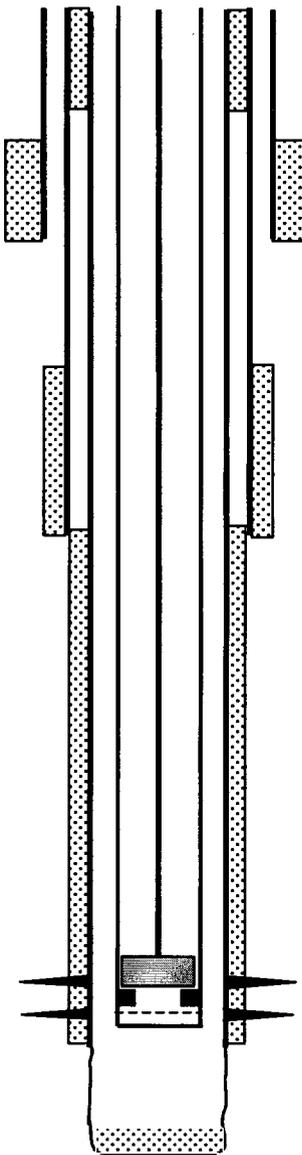
I will delay approving the pressure increases until I get the requested diagrams.

Thanks for the help.

David Catanach
Engineer

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #3			FIELD: GRAYBURG-JACKSON			
LOCATION: 1980' FSL & 1980' FWL, SEC 19-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3610'; KB=UNK			SPUD DATE: 03/12/44		COMP DATE: 04/15/44	
API#: 30-015-05251		PREPARED BY: John Petty		DATE: 12/15/2004		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 482'	8 5/8"	24#			
CASING:	0' - 1802'	7"	20#			
CASING:	0' - 3074'	5 1/2"	15.5#	J-55		
TUBING:	0' - 3030'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

BRAIDENHEAD SQUEEZED IN 1994

8 5/8" CASING @ 482' W/50 SXS. TOC @ 350' (calculated)

7" CASING @ 1802' W/100 SXS. TOC @ 870' (calculated)

DETAIL OF PERFORATIONS

2958', 60', 82', 83', 84', 3026', 28', 30', 42', 44'

PERFORATIONS: 2958'- 3044' (OA) - 10 HOLES

SEAT NIPPLE @ 2995'

5 1/2" CASING @ 3074' W/80 SXS. TOC @ 1800' (CBL)

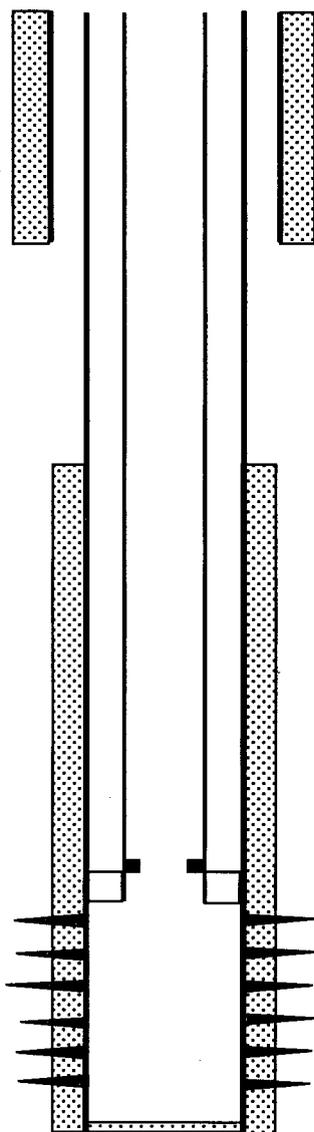
4 3/4" OPEN HOLE: 3074'- 3100'

PBTD @ 3100'(PEA GRAVEL & HYDROMITE)

TD @ 3134'

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: TURNER "B" #44			FIELD: GRAYBURG-JACKSON			
LOCATION: 660' FSL & 2055' FWL, SEC 20-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3684'; KB=UNK			SPUD DATE: 10/30/55		COMP DATE: 11/21/55	
API#: 30-015-05311		PREPARED BY: John Petty		DATE: 12/17/2004		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 471'	8 5/8"	28#			
CASING:	0' - 3340'	5 1/2"	14#			
CASING:						
TUBING:	0' - 2856'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

8 5/8" CASING @ 471' W/270 SXS. TOC @ SURFACE

TOC = 1643' (calculated)

DETAIL OF PERFORATIONS

U.GRAYBURG: 2914', 16', 34', 38', 48', 52'

M.GRAYBURG: 2972', 75'

LOCO HILLS: 3000', 12', 14', 29'

METEX: 3044', 48', 56'

L.GRAYBURG: 3130', 32', 50', 54'

PREMIER: 3161'-76' (6 SPF), 3185'-88' (2 SPF), 3197', 99', 3201', 24',
27', 28', 48', 50', 54', 3257'-62' (2 SPF), 3264'-69' (2 SPF)

VACUUM: 3277', 79', 91', 93', 94', 98', 3300', 02', 05', 07', 08', 18',
20', 27', 29', 30', 31', 32', 33', 34'

BAKER AD-1 PACKER @ 2861'

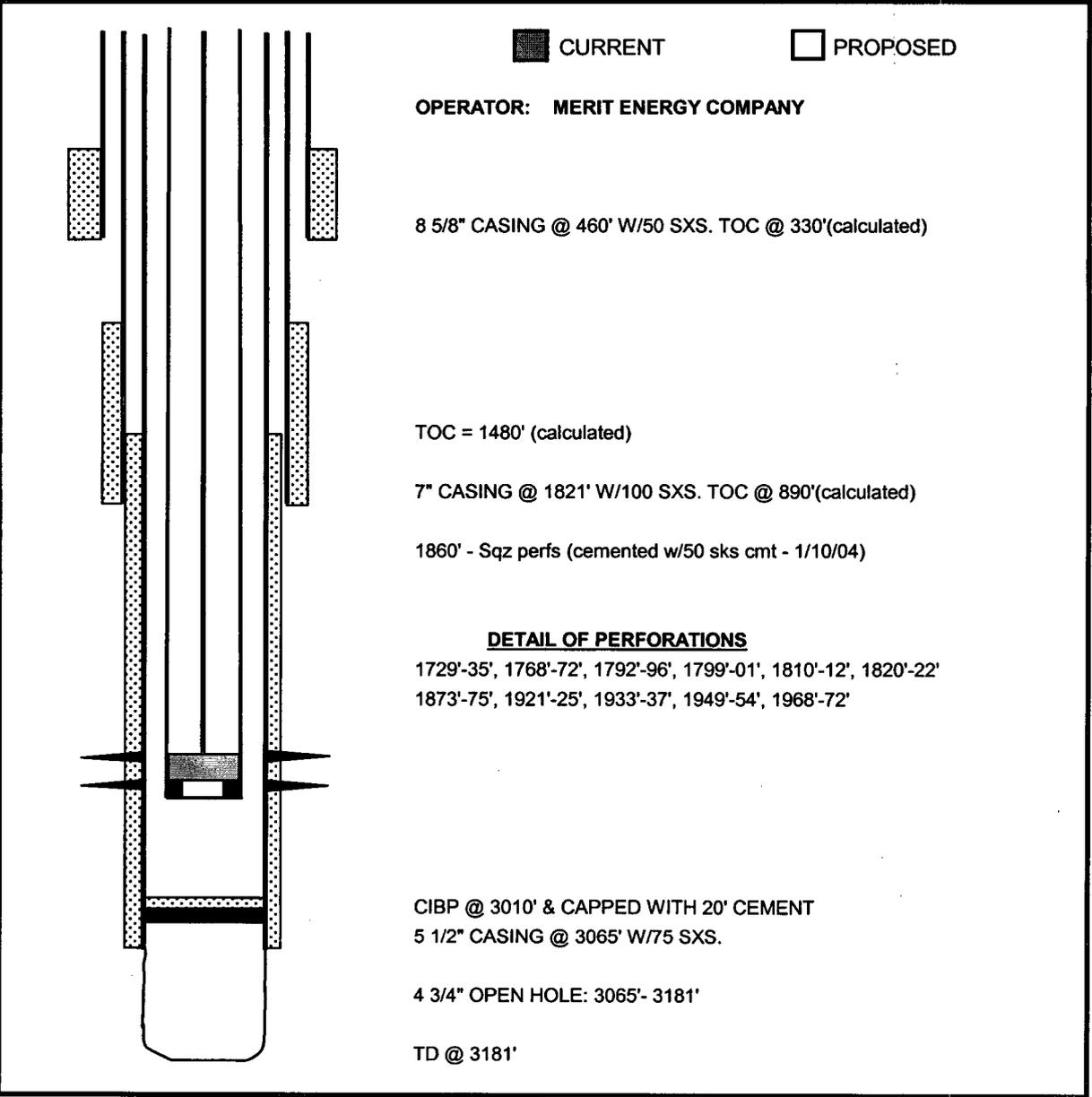
PERFORATIONS: 2914'- 3334'(OA) - 164 HOLES

5 1/2" CASING @ 3340' W/125 SXS.

TD @ 3342'

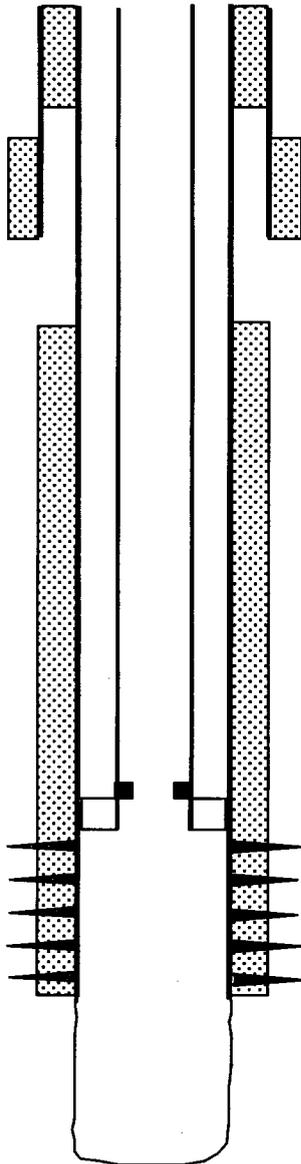
MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #2			FIELD: GRAYBURG-JACKSON			
LOCATION: 660'FSL & 1980'FWL, SEC 19-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3581'; KB=UNK			SPUD DATE: 10/02/43		COMP DATE: 11/29/43	
API#: 30-015-05250		PREPARED BY: John Petty		DATE: 12/17/2004		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 460'	8 5/8"	24#			
CASING:	0' - 1821'	7"	20#			
CASING:	0' - 3065'	5 1/2"	15.5#	J-55		
TUBING:						
TUBING:						



MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #12			FIELD: GRAYBURG-JACKSON			
LOCATION: 610' FSL & 1980' FEL, SEC 19-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3585'; KB=UNK			SPUD DATE: 12/14/54		COMP DATE: 02/11/55	
API#: 30-015-05260		PREPARED BY: John Petty			DATE: 12/14/2004	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 499'	8 5/8"	28#			
CASING:	0' - 3080'	7"	20#	J-55		
CASING:						
TUBING:	0' - 2719'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

PRODUCTION CASING IS CEMENTED FROM 450' TO SURFACE

8 5/8" CASING @ 499' W/50 SXS. TOC @ 410' (calculated)

TOC = 1085' (Calculated)

1800' - 4 sqz holes (sqz'd 100 bbls class C cmt - 8/17/04)

1875' - 4 sqz holes (8/17/04)

DETAIL OF PERFORATIONS

GRAYBURG: 2785', 89', 93', 95'

U.GRAYBURG: 2845', 53', 55', 57', 59', 75', 82', 84', 87'

LOCO HILLS: 2933', 34', 49', 51'

METEX: 2978', 86', 88', 90', 3024', 30'

L.GRAYBURG: 3060'-3070' (25 HOLES)

PACKER @ 2765'

PERFORATIONS: 2785'- 3070'(OA) - 48 HOLES

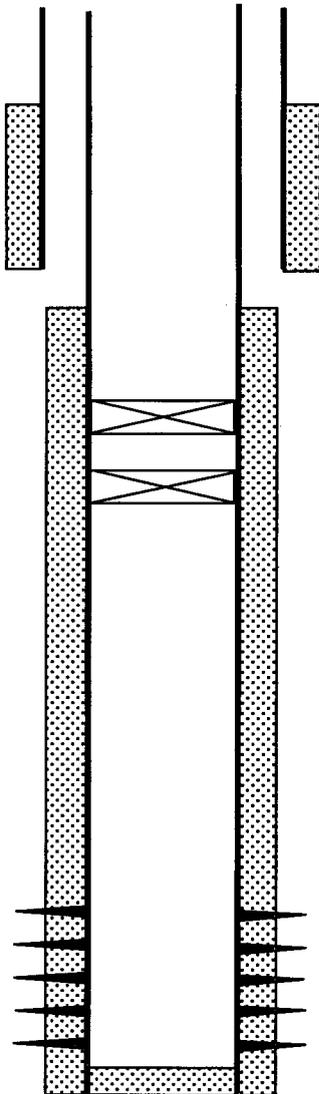
7" CASING @ 3080' W/125 SXS.

6 1/8" OPEN HOLE: 3080'- 3200' (PREMIER INTERVAL)

TD @ 3200'

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: TURNER "B" #50			FIELD: GRAYBURG JACKSON			
LOCATION: 660' FNL & 660' FWL, SEC 29-T17S-R31E			COUNTY: EDDY COUNTY		STATE: NM	
ELEVATION: GL=3626'; KB=UNK			SPUD DATE: 10/06/57		COMP DATE: 11/25/57	
API#: 30-015-05437		PREPARED BY: John Petty			DATE: 12/14/2004	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 598'	10 3/4"	32.75#	H-40		
CASING:	0' - 3374'	7"	20,23#	J-55		
CASING:						
TUBING:	0' - 2866'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT
 PROPOSED

OPERATOR: MERIT ENERGY COMPANY

10 3/4" CASING @ 598' W/100 SXS. TOC @ 250' (calculated)

TOC = 1365' (calculated)

2215' - 4 sqz perms (cemented w/120 bbls cmt - 7/22/04)

CIBP - 2515' w/3 sx cmt - set 8/24/04

Fish - 2780' (RBP set 7/21/04, can't mill thru)

DETAIL OF PERFORATIONS

U. GRAYBURG: 2914', 16', 18', 46', 48', 50'

M. GRAYBURG: 2963', 78', 89'

LOCO HILLS: 3007', 09', 13', 44'

METEX: 3065', 83', 84', 85'

L. GRAYBURG: 3154', 56', 3172'-75' (1 SPF)

PREMIER: 3180'-90' (1 SPF), 3208'-24' (4 SPF), 3268'-78' (1 SPF)

3280'-85' (1 SPF)

VACUUM: 3306'-10' (8 SPF), 3314'-20' (8 SPF)

PERFORATIONS: 2914'- 3320' (OA) - 191 HOLES

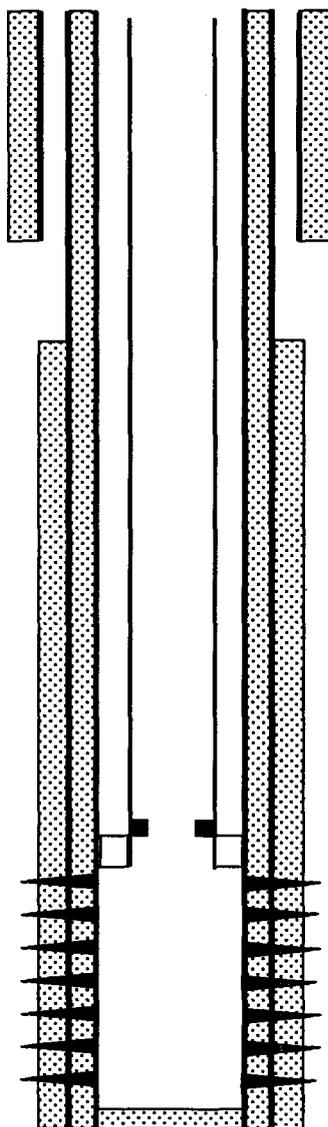
PBTD @ 3340'

7" CASING @ 3374' W/100 SXS.

TD @ 3375'

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: TURNER "A" #36			FIELD: GRAYBURG-JACKSON			
LOCATION: 1800' FNL & 1980' FEL, SEC 19-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3620' ; KB=3630'			SPUD DATE: 11/18/67		COMP DATE: 12/10/67	
API#: 30-015-20098		PREPARED BY: John Petty		DATE: 12/15/2004		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 605'	9 5/8"	32.3#	H-40		12 1/4"
CASING:	0' - 3450'	7"	20,23,26#	J-55		8 3/4"
CASING:	0' - 3450'	4 1/2"	11.6#	J-55	LT&C	
TUBING:	0' - 2637'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

9 5/8" CASING @ 605' W/350 SXS. TOC @ SURFACE

TOC = 1193' (calculated)

1760' - 4 sqz holes (cmt'd w/76 bbls cmt - 7/19/04)

DETAIL OF PERFORATIONS

- U.GRAYBURG:** 2713', 19', 23', 40', 44', 50', 54'
- M.GRAYBURG:** 2768'
- LOCO HILLS:** 2806', 09'
- METEX:** 2847', 51', 55', 69', 79'
- L.GRAYBURG:** 2917', 37', 39', 41'
- PREMIER:** 2973', 77', 79', 86', 88', 97', 3000', 02', 18', 21', 37', 39', 43'
- VACUUM:** 3045', 86', 95', 3125', 28', 49', 54'
- LOVINGTON:** 3163', 68', 72', 85', 87', 3205'
- U.JACKSON:** 3211'
- M.JACKSON:** 3334', 43', 53', 81', 85', 89', 3405', 09', 11', 13', 15', 17'

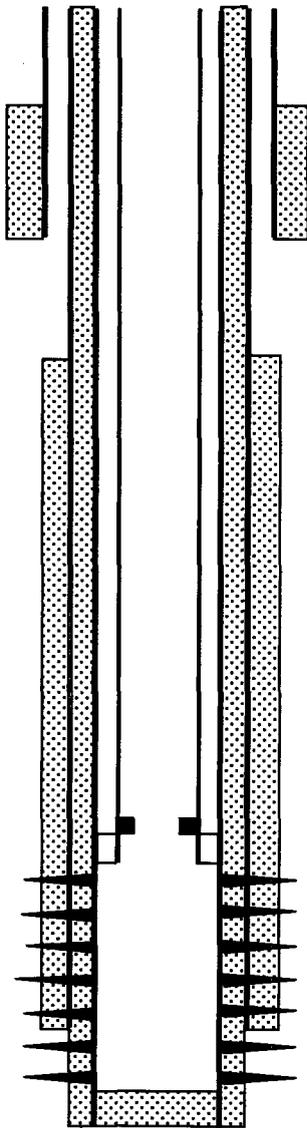
BAKER AD-1 PACKER @ 2644'

PERFORATIONS: 2713'-3417'(OA) - 58 HOLES

PBTD @ 3448'
 7" CASING @ 3450' W/450 SXS.
 4 1/2" CASING @ 3450' W/400 SXS. TOC @ SURFACE.
 TD @ 3450'

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: MAX FRIESS #4			FIELD: GRAYBURG-JACKSON			
LOCATION: 1980' FNL & 660' FEL, SEC 30-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3616'; KB=UNK			SPUD DATE: 08/26/57		COMP DATE: 10/06/57	
API#: 30-015-05471		PREPARED BY: John Petty		DATE: 12/15/2004		
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 614'	10 3/4"	32.75#			
CASING:	0' - 3396'	7"	20#			
CASING:	0' - 3602'	4 1/2"	11.6#	J-55	LT&C	6 1/4"
TUBING:	0' - 2839'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

10 3/4" CASING @ 614' W/100 SXS. TOC @ 260' (calculated)

TOC = 1614' (calculated)

2080' - sqz holes (cmt'd w/140sx premium neat - 8/26/04)

DETAIL OF PERFORATIONS

- GRAYBURG: 2910', 12'
- U.GRAYBURG: 2953', 61', 63', 81', 88', 90', 92'
- LOCO HILLS: 3048', 50', 59', 61'
- METEX: 3097', 3102', 08', 10', 12'
- L.GRAYBURG: 3177', 89'
- PREMIER: 3216', 18', 26', 30', 34', 38', 42'
- VACUUM: 3366', 69', 72', 3400', 03'
- LOVINGTON: 3460', 63', 66', 70', 74', 88', 90'
- U.JACKSON: 3502', 21', 28', 39', 52', 56', 62'

BAKER AD-1 PACKER @ 2853'

PERFORATIONS: 2910'- 3562' (OA) - 46 HOLES

7" CASING @ 3396' W/100 SXS.

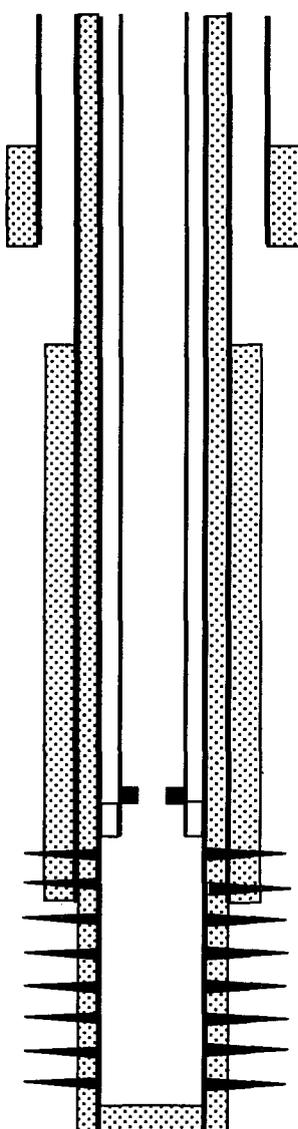
PBTD @ 3564'

4 1/2" CASING @ 3602' W/350 SXS. TOC @ SURFACE.

TD @ 3602'

MERIT ENERGY COMPANY WELLBORE SCHEMATIC

WELL NAME: FREN OIL COMPANY #13			FIELD: GRAYBURG-JACKSON			
LOCATION: 660'FSL & 710'FEL, SEC 19-T17S-R31E			COUNTY: EDDY		STATE: NM	
ELEVATION: GL=3594'; KB=UNK			SPUD DATE: 03/05/55		COMP DATE: 06/13/55	
API#: 30-015-05261	PREPARED BY:		John Petty		DATE: 12/14/2004	
	DEPTH	SIZE	WEIGHT	GRADE	THREAD	HOLE SIZE
CASING:	0' - 514'	8 5/8"	28#			10"
CASING:	0' - 3194'	7"	20#	J-55		8"
CASING:	0' - 3502'	4 1/2"	11.6#	K-55	LT&C	6 1/8"
TUBING:	0' - 2722'	2 3/8"	4.7#	J-55	EUE 8rd	
TUBING:						



CURRENT PROPOSED

OPERATOR: MERIT ENERGY COMPANY

8 5/8" CASING @ 514' W/75 SXS. TOC @ 390'(calculated)

TOC = 1244' (calculated)

DETAIL OF PERFORATIONS

- GRAYBURG: 2782', 2805'
- U.GRAYBURG: 2831', 40', 42', 46', 60', 66', 69', 72'
- LOCO HILLS: 2920', 22', 44', 46'
- METEX: 2961', 72', 86', 88', 3000', 02'
- L.GRAYBURG: 3046', 48', 64'
- PREMIER: 3074', 78', 82', 86', 90', 3110', 38', 53', 69', 76', 80', 83', 87'
- VACUUM: 3205', 16', 23', 30', 35', 42', 70'
- LOVINGTON: 3320', 24', 34', 37', 69'

PACKER @ 2723'

7" CASING @ 3194' W/150 SXS.

PERFORATIONS: 2782'- 3369' (OA) - 48 HOLES

PBTD @ 3473'

4 1/2" CASING @ 3502' W/400 SXS. TOC @ SURFACE
TD @ 3502'

PM

cc

Subject

Pressure Increase

John,

I received your data and I am currently reviewing it. With regards to the Turner "B" No. 44, your sundry shows no work done on this well. The application for WFX-795 shows that this well had a cement top of 2535 by temperature survey. Also, your sundry notices for the Fren Oil Company Nos. 3 and 13 show no work done. Can you further elaborate on these wells?

Thanks,
I'll be back in on Tuesday morning. I'll give you a call.

David

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Catanach, David

From: John Petty [John.Petty@meritenergy.com]
Sent: Tuesday, January 04, 2005 2:21 PM
To: Catanach, David
Subject: Re: Pressure Increase

Mr. Catanach,
Thank you for your note. I have brief descriptions below for the wells you mentioned in your email.

Turner "B" No. 44 - Our records indicate a C-103 sundry notice filed on 10/13/04 by Beverly Hatfield. The C-103 documents a rig workover performing remedial squeeze operations from 7/27/04 - 8/3/04. An RBP was placed at 2842', squeeze perforations were shot at 2450', and the cement retainer was placed at 2410'. A total of 112 bbls of cement was pumped thru the squeeze holes. The cement was drilled out, and a packer was RIH to 2861' to test the squeeze. The squeeze held 500 psi for 15 minutes with no pressure let off. The new top of cement was calculated to be 1643' assuming a 75% washout factor. The interval to be protected for this well was 1874'-2022'. Please advise if you do not have this sundry and we will resend.

Fren Oil Company No. 3 - No remedial cementing work was done on this well because it was not necessary. The CBL field personnel ran on 3/15/04 showed good cement at 1800'. The 7" casing shoe is at 1802'. The interval we were supposed to protect was 1850'-2030'. This zone is already behind good pipe (as known by pipe tallies and pressure tests) and good cement (as shown by 3/15/04 CBL). This indicates the zone of interest is covered with cement.

Fren Oil Company No. 13 - The interval to be protected in this well was 1729'-2050' (gross). It was on the list to remediate because it's initial cement top was calculated to be 1980'. This initial calculation was incorrect because the CBL run on 8/26/04 seemed to indicate the cement top at 1720'. We perfed multiple squeeze holes and were unable to achieve a pump-in rate - the casing still held pressure indicating good cement behind pipe. The highest perfs shot were 1650', and they held 1500 psi for 15 'minutes (w/50 psi dropoff) - a passing pressure test. This indicates that the zone of interest is covered with cement.

I hope this what you were looking for. It may be worth a phone call to discuss. Thanks for your help with this.

John Petty
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Merit Energy Company
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(972) 960-1252 - Fax

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01/03/2005 03:36

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