

N. M. Oil Conservation Division

811 S. 1st

ARTESIA, NM 88210-2834

Form 3160-5
(June 1990)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 19935. Lease Designation and Serial No.
NMLC-054908

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Fair "17" Fed. #1

9. API Well No.

30-015-28969

10. Field and Pool, or Exploratory Area

Wildcat-Devonian

11. County or Parish, State

Eddy County, New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Burns Operating Co.

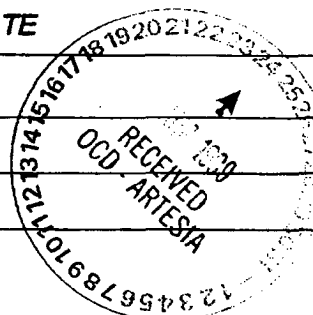
3. Address and Telephone No.

P.O. Box 97525 Wichita Falls, TX 76309

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1792' FNL & 727' FWL

Sec. 17-T17S-R31E



12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☐ Notice of Intent☒ Subsequent Report☐ Final Abandonment Notice

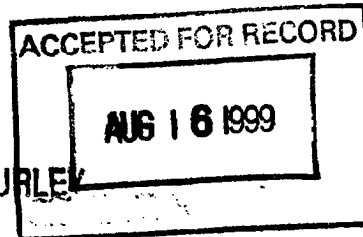
TYPE OF ACTION

☐ Abandonment☐ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☒ Other Run 8 5/8 csg.☐ Change of Plans☐ New Construction☐ Non-Routine Fracturing☐ Water Shut-Off☐ Conversion to Injection☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Drill 12 1/4" hole to 4700'. TD 12 1/4" hole at 1145 hrs on 6-4-96. Rig up and run 4703', 8 5/8" 32#/ft, S80 & J55 LT&C csg. Set csg at 4700'. Cement with 1550 sx. Howco Lite + 5#/sx salt + 1/4#/sx Flocele, (yld = 2.05 cu ft, wt = 12.6), tailed with 250 sx. Class C + 2% CaCl2. Had good circulation throughout. Plug down at 02:30 hrs 6/5/96. Did not circulate. WOC 18 hrs. Test BOP and head to 5000# by independent tester. Drill out at 2045 hrs, 6/5/96. TOC at 280' by temp survey.



ORIG. SGD | GARY GOURLEY

14. I hereby certify that the foregoing is true and correct

Signed

Title Agent

Date 06/10/96

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

DRILLING REPORT

March 2002

WELL NAME & NO: FAIR "17" FEDERAL #1

BURNS ENTITY: BMB/AHB TRUSTS

OPERATOR: BURNS OPERATING

LOCATION: 1792' FNL, 727' FNL, SEC 17-T179-31E

ELEVATIONS

EDDY COUNTY, NEW MEXICO, LOCO HILLS PROSPECT

GL:

DF:

KB:

CONTRACTOR: ZIADRI #2

PROJECTED DEPTH: 12,210'

DATE	PREV DEPTH	CUR DEPTH	FOOTAGE DRLD	ACTIVITY	PAGE 1
5-25-98	0	600	600	DRLG W/FRESH WTR. RED BED & ANHY. DEV 1 DEG @ 390', 1 DEG @ 600'. LOST CIRC @ 178'. PMP LCM SWEEPS & REGAINED SPORADIC RETURNS. RAN 13 JTS, 603' 13-3/8" 48# H-40 ST&C CSG. SET @ 600'. CMT 2/350 SX LITE +5# SX GILSONITE + 1/4#SX FLOCELE + 3% CACL2, TAIL W/200 SX CLASS "C" + 2% CAC12. CIRC 115 SX TO PIT. PLUG DN @ 11:15 PM 5-24-98. BMP PLUG TO 500#. FLOAT HELD OK. DWC \$40,708. CWC \$55,708.	
5-28-98	600	1805	1005	DRLG SALT & ANHY. MW 10, VIS 28, PH 9, CL 198,000. DEV 1 DEG @ 920', 1-1/2 DEG @ 1386'. NIP UP HYDRIL & ROTATING HEAD. TEST HEAD AND HYDRIL TO 750# FOR 30 MIN - OK. DWC \$25,054. CWC \$80,762.	
5-27-98	1805	2205	400	DRLG ANHY, DOLO. MW 10, VIS 28, PH 9, CL 194,000. DEV 3/4 DEG @ 1705', 3/4 DEG @ 2047'. SWEEP HOLE @ 1670' & 2062'. DWC \$14,007. CWC \$94,769.	
5-28-98	2205	2655	1455	DRLG ANHY, DOLO. MW 10, VIS 28, PH 9.5, CL 192,000. DEV 3/4 DEG @ 2389'. SWEEP HOLE @ 2389'. DWC \$10,623. CWC \$105,388.	
5-29-98	2655	3027	372	DRLG ANHY, DOLO. MW 10, VIS 28, PH 9.5, CL 189,000. DEV 1/2 DEG @ 2735'. SWEEP HOLE @ 2735'. DWC \$9,231. CWC \$114,617.	
5-30-98	3027	3278	251	DRLG ANHY, DOLO. MW 10, VIS 28, PH 9.5, CL 187,000. DEV 1 DEG @ 3078'. SWEEP HOLE @ 3078'. NO FLOW DURING TRIP FOR BIT. DWC \$8,031. CWC \$120,648.	
5-31-98	3278	3418	138	DRLG ANHY, DOLO, LM. MW 10, VIS 28, PH 9.5, CL 189,000. NOSE CONE ON BIT CAME OFF LOCKING DN BIT & CAUSED TWIST OFF OF PIPE. LAY DN 29 JTS OF 4-1/2" DRILL PIPE DAMAGED BY TORQUE, NO FLOW DURING TRIPS OR FISHING. DWC \$3,877. CWC \$124,525.	
6-1-98	3418	3770	354	DRLG DOLO, LM. MW 10, VIS 28, PH 9.5, CL 189,000. DEV 1-1/4 DEG @ 3413'. SWEEP HOLE @ 3382' & 3620'. DWC \$10,794. CWC \$135,319.	
6-2-98	3770	4115	345	DRLG DOLO, LM. MW 10, VIS 28, PH 9.5, CL 189,000. DEV 1 DEG @ 3755'. DWC \$8,799. CWC \$144,118.	
6-3-98	4115	4380	265	DRLG DOLO, LM. MW 10, VIS 28, PH 9.5, CL 190,000. DEV 3/4 DEG @ 4129'. DWC \$6,454. CWC \$150,572.	
6-4-98	4380	4610	230	DRLG DOLO, LM. MW 10, VIS 28, PH 9.5, CL 190,000. DEV 1/2 DEG @ 4465'. HUNG UP WHILE POOH FOR BIT. PLACE STRING REAMER IN STRING AND GO BACK TO BOT & REAM FROM 1700-1900' W/O DRAG OR TORQUE. POOH. LAY DN REAMER & MAKE BIT TRIP. DWC \$5,738. CWC \$156,310.	
6-5-98	4610	4700	90	DRLG DOLO, LM. MW 10, VIS 28, PH 9.5 CL 190,000. DEV 1 DEG @ 4700'. RU & RUN 8-5/8" 32# 3-80 CSG +32# J-55 CSG. TOTAL FOOTAGE 4703'. SET CSG @ 4700'. CMT W/1550 SX HOWCO LITE +5#SX SALT +1/4#SX FLOCELE +250 SX CLASS "C" +2% CACL2. DID NOT CIRC. FLOAT HELD OK. GOOD CIRC THROUGHOUT. CENTRALIZERS ON #1, 4, 7, 14. WOC 8 HRS. DETAILED CSG REPORT TO FOLLOW. DWC \$70,988. CWC \$227,298.	
6-6-98	4700	4830	130	DRLG DOLO, LM. MW 8.4, VIS 28, PH 9.5. RU SAFETY TEST & TEST BOP, HEAD, BLIND RAMS, CK MANIFOLD & VALVES TO 3000# FOR 30 MIN W/O LEAKS. TEST PIPE RAMS TO 3000# FOR 30 MIN W/O LEAKS. TEST ANNULAR BOP TO 2000# FOR 30 MIN W/O LEAKS. TEST ACCUMULATOR & CLOSING TIMES. DWC \$7,258. CWC \$234,556.	
6-7-98	4830	5525	695	DRLG DOLO. MW 8.4, VIS 28, PH 9.5, CL 22,000. DEV 1-1/4 DEG @ 5052', 3/4 DEG @ 5398'. DWC \$15,755. CWC \$250,311.	
6-8-98	5525	6170	645	DRLG DOLO. MW 8.4, VIS 28, PH 10, CL 18,000. DEV 1 DEG @ 5771', 3/4 DEG @ 6116'. NO SHOWS. DWC \$15,913. CWC \$266,224.	
6-9-98	6170	6614	444	TRIP FOR BIT. DOLO. MW 8.5, VIS 28, PH 10, CL 18,000. DEV 1-1/4 DEG @ 6458'. NO SHOWS. DWC \$10,685. CWC \$276,909.	
6-10-98	6614	7015	401	DRLG DOLO. MW 8.5, VIS 28, PH 10, CL 18,000. DEV 1-1/2 DEG @ 6801'. NO SHOWS. DWC \$9,681. CWC \$286,590.	
6-11-98	7015	7435	420	DRLG SHALE, DOLO. MW 8.5, VIS 28, PH 9.5, CL 18,000. DEV 1-1/2 DEG @ 7144'. SWEEP HOLE @ 7155'. DWC \$10,928. CWC \$297,518.	
6-12-98	7435	7732	297	DRLG DOLO. MW 8.5, VIS 28, PH 9.5, CL 18,000. DEV 1-3/4 DEG @ 7486', 1-1/2 DEG @ 7674'. SWEEP HOLE @ 7486'. DWC \$7,497. CWC \$305,015.	
6-13-98	7732	8048	314	TOH FOR DST #1. MW 8.5, PH 9.5, CL 18,000. DWC \$9,938. CWC \$313,953.	
6-14-98	8048	8048	0	TTH AFTER DST #1. MW 8.5, VIS 28, PH 9.5, CL 18,000.	
6-15-98	8048	8258	210	DST #1: 8020' TO 8048'. OPEN TOOL W/STRONG BLOW 30 MIN. BOB IN 30 SEC. BUILD TO 20# ON 1/8 CK. GAS TO SURF 5 MIN INTO SI PERIOD. OPEN TOOL W/1 OZ ON 1/4 CK 60 MIN. INCR TO 1# ON 1/4 CK. OPEN TOOL W/1/2 OZ 120 MIN ON 1/4. INCR TO 8# ON 1/4 CK. PULL TOOL LOOSE & PULL REC. DRILL PIPE REC 320' GCO, 37 GRAY. (4.6 BBLs). 35' RAT HOLE MUD, 15,000 CL. 2716' BLACK SULPHUR WTR (28,000-32,000 CL 0.272 OHM) 31 BBLs. SAMPLER REC. 980 PSI, 1.38 CF GAS, 150 CC OIL, 1800 CC SULPHUR WTR. IHYD 3518#, IF/20 MIN 83-357#, ISIP/60 MIN 2802#, 2ND FLOW 4804-7334/65 MIN. 2ND SIP/121 MIN 2789#, 3RD FLOW/120 MIN 834-1275#, 3RD SIP/240 MIN FINAL 2791#, FHYD 3500#.	
6-16-98	8258	8398	142	WAITING ON DST TOOLS. MW 8.5, VIS 28, PH 9.5, CL 13,000. DEV 1 DEG @ 8228'. DWC \$8,631. CWC \$332,144.	
				DRLG LIME. MW 8.5, VIS 28, PH 9.5, CL 13,000. DWC \$10,842. CWC \$343,086.	

DST #2: 8220-88'. OPEN TOOL W/WEAK BLOW. END OF FLOW IN 15 MIN W/1" IN BUCKET, SI FOR 1 HR. OPEN TOOL 45 MIN. MAX 2.5 OZ SI FOR 90 MIN. REC IN DP: .6 BBL OIL & 1.5 BBL RATHOLE DRLG FLUID. SAMPLER REC: .225 CU FT GAS, 1700 CC OIL & 60 CC DF. OIL 37 GRAY, 90 PSI. IH 2811/15 MIN, IF 75-92/15 MIN, ISIP 212/60 MIN, FF 113-126/45 MIN, FBIP 237/60 MIN, FH 3618.

Steve Hanger

(817) 322-0021



DATE	PREV DEPTH	CUR DEPTH	FOOTAGE DRLD	ACTIVITY	PAGE 2
SPUD					
				FAIR "17" FEDERAL #1	
6-17-98	8398	8822	424	CIRC SAMPLES. LM MW 8.5, VIS 28, PH 9.5, CL 10,000. DEV 1-3/4 DEG @ 8569'. DRLG BRK 8797-8810. DWC 10,542. CWC \$353,828.	
6-18-98	8822	8822	0	POH WDST TOOLS, REVERSE REC. MW 8.5, VIS 28, PH 9.5, CL 11,000. DEV 1-3/4 DEG @ 8569'. DST #3: 8788-8822'. HAD BRIDGE @ 8807'. OPEN TOOL AND FALL THROUGH. GO TO BOT W/TOOL. TOOL DID NOT STAY OPEN. RECYCLE TOOL. OPEN TOOL W/GOOD BLOW, BOB IN 2 MIN ON 1/4" CK. INCR TO 9.5# ON 1/4 IN 30 MIN. HAD GTS 5 MIN IN ISIP, OPEN TOOL FOR 2ND FLOW W/3 OZ ON 1/4. INCR TO 8# IN 30 MIN & 10.5# IN 60 MIN. OPEN TOOL FOR 3RD FLOW W/WEAK BLOW. INCR TO 11# AT END OF 60 MIN. CONT 11# TO 110 MIN. 10.5# IN 120 MIN. PULL LOOSE. PULL 66 STANDS TO FLUID. REVERSE REC TO TEST TANK. REC 18 BBLs OIL, 12 BBLs SULPHUR WTR. IH 3844, IF 110-332/30 MIN, ISIP 3315/60 MIN, 2ND FLOW 408-618/45 MIN, 2ND SIP 2979/90 MIN, FF 700-978/120 MIN, FSIP 2586/240 MIN, FHYD 3843.	
6-19-98	8822	9136	314	DRLG LM, SH, CHERT. MW 8.4, VIS 28, PH 9.5, CL 28,000. DEV 1-3/4 DEG @ 8943'.	
6-20-98	9136	9424	288	TOOH FOR BIT. DRLG LM, SH, CHERT. MW 8.7, VIS 33, PH 10, CL 52,000. DEV 1-1/2 DEG @ 9273'. LOSING 8 BBLs/HR AFTER 9172. 14 BBLs/HR AFTER 9228. MUD UP & FLUID LOSS-0 AFTER MUD UP. DWC \$15,196. CWC \$387,938.	
6-21-98	9424	9692	268	DRLG LM, SH, MW 8.7, VIS 34, PH 10, CL 46,000. DEV 1-1/2 DEG @ 9424'. CIRC SAMPLES @ 9670'. DWC \$8,378. CWC \$396,318.	
6-22-98	9692	10020	328	DRLG LM, SH, MW 8.7, VIS 34, PH 10, CL 44,000. DEV 1-1/4 DEG @ 9786'. DWC \$10,445. CWC \$406,761.	
6-23-98	10020	10320	300	DRLG LM, SH, MW 8.8, VIS 37, PH 10, CL 40,000. DEV 1-1/2 DEG @ 10,130'. DWC \$9,688. CWC \$416,449.	
6-24-98	10320	10591	271	DRLG LM. CIRC SAMPLES. MW 8.8, VIS 38, PH 10, CL 40,000. DEV 1-1/4 DEG @ 10,444'. DWC \$8,231. CWC \$414,680.	
6-25-98	10591	10821	220	DRLG LM. MW 9.0, VIS 38, PH 10, CL 38,000. DEV 1-1/4 DEG @ 10,444'. DWC \$8,398. CWC \$433,078.	
6-26-98	10821	10905	83	TOH FOR DST #4. MW 9.0, VIS 35, PH 10, CL 43,000. DEV 1-1/4 DEG @ 10,812. DWC \$6,048. CWC \$439,124.	
6-27-98	10905	10947	42	DRLG. LM, SH, MW 9.0, VIS 35, PH 10, CL 41,000. DWC \$10,042. CWC \$449,166. DST #4: 10889-10905. OPEN TOOL W/WEAK BLOW INCR TO GOOD BLOW. GTS/50 MIN. FF PERIOD. REC. 400' HEAVY OIL & GCM, 50' OIL. IHVD 5077, IF 83-116/30 MIN., ISIP 3993/60 MIN., 2ND FL PERIOD 66-208/90 MIN., FSIP 4462/180 MIN. FHYD 6056.	
6-28-98	10947	11177	230	DRLG LM, SH, MW 9.1, VIS 35, PH 10, CL 44,000. DWC \$8,473. CWC \$457,639.	
6-29-98	11177	11225	48	TIH FOR DST #5. MW 9.1, VIS 35, PH 10, CL 39,000. DWC \$6,468. \$464,107.	
6-30-98	11225	11225	0	TIH FOR DST #6. MW 9.1, VIS 35, PH 10, CL 39,000. DST #6: 11,212-225'. PLUGGED TOOL.	
7-1-98	11225	11225	0	CIRC FOR DST #7. MW 9.1, VIS 40, PH 10, CL 33,000. DWC \$12,330. CWC \$486,197. DST #6: 11-211'-11,225'. PLUGGED TOOL.	
7-2-98	11225	11225	0	CIRC FOR DST #7. MW 9.1, VIS 40, PH 10, CL 33,000. DWC \$22,913. CWC \$509,110.	
7-3-98	11225	11293	68	DRLG. LM, SH, MW 9, VIS 38, PH 10, CL 31,000. DST #7: 11211'-11225'. RU & RUN 100,000 SCF N2 BLANKET. OPEN TOOL. NO PRESSURE INCR. BLOW DN TO PIT ON 1/4" CK. SURF PRESSURE 980#. OPEN UP ON 3/8 CK. BLOW DN TO 0. TOOL OPEN FOR TOTAL OF 165 MIN. SHUT TOOL IN FOR 150 MIN. OPEN TOOL BACK UP ON 1/8 CK W/1/2" IN BUBBLE BUCKET. PRESSURE INCR TO BOT OF BUBBLE BUCKET. CONT INCR TO 6.5# ON 1/8 CK. OPEN UP TO 1/4 CK & FELL TO 6#. GTS 200 MIN INTO 2ND FLOW. PRESSURE STARTED DROPPING & DROPPED TO 10 OZ AT END OF FLOW PERD. TOTAL FF WAS 270 MIN. SI FOR 330 MIN. PULL LOOSE & PULL TO REC. REC 2635' VERY HEAVILY GAS AND CONDENSATE CUT DRLG MUD. REVERSE REC OUT. MUD SAMPLES HAD CL 43,000 PIT SAMPLE BY TESTER WAS 43,000. SAMPLE CHAMBER REC: PRESSURE 1170#, 3.29 CFQ, 550 CC CONDENSATE (48.8 GRAV) & 900 CC DRLG MUD. BHT 152 DEG. GAUGE DEPTH 11,218'. IHVD 5168, IF 2435-1179/165 MIN., ISIP 4817/160 MIN., FF 1179-1172/270 MIN., FSIP 6206/330 MIN.	
7-4-98	11293	11479	186	DRLG LMSD. TRIP FOR HOLE IN DP. MW 9.1, VIS 38, PH 10, CL 36,000. DWC \$11,108. CWC \$530,408.	
7-5-98	11479	11662	183	DRLG LMSH. MW 9, VIS 38, PH 10, CL 36,000. DEV 2 DEG @ 11,596'. DWO \$5,332. CWC \$535,738.	
7-6-98	11662	11807	145	DRLG LM/SH. TRIP FOR BIT. MW 9.1, VIS 37, PH 10, CL 45,000. DWC \$6,981. CWC \$542,719.	
7-7-98	11807	11912	105	DRLG LM/CHERT/SH. MW 9.2, VIS 38, PH 9, CL 39,000. DEV 1-1/2 DEG @ 11,912. DWC \$3,723. CWC \$546,442.	
7-8-98	11912	12113	201	DRLG LM/CHERT. MW 9.1, VIS 38, PH 10, CL 40,000. DWC \$8,146. CWC \$554,588.	
7-9-98	12113	12321	208	DRLG DOLO/SH. CIRC SAMPLES. MW 9.2, VIS 38, PH 10, CL 38,000. DRLG BRK DEVONIAN - 12311-21' FROM 5'/FT TO 1'/FT. DWC \$6,763. CWC \$561,351.	
7-10-98	12321	12321	0	WAITING ON LOGGERS. MW 9.2, VIS 38, PH 10, CL 38,000. DWC \$9,760. CWC \$571,111. DST #8: 12,321-21'. REC 80' GCM & WTR. CL 28,000 PPM, IHVD 5911, IF 322-367/16 MIN, ISIP 5014/60 MIN, FF 344-436/60 MIN, FSIP 6008/120 MIN, FHYD 5903. SAMPLE CHAMBER .35 CU FT GAS, 1300 CC WTR, CL 27,000 PPM, 900 CC MUD, CL 22,000 PPM, RAN 806' WTR CUSHION.	
7-11-98	12321	12321	0	RUNNING ELECTRIC LOGS. MW 9.2, VIS 37, PH 10, CL 38,000. DWC \$32,573. CWC \$603,664.	
7-12-98	12321	12321	0	CIRC. PREP TO P&A. DWC \$5860. CWC \$609,724.	

DATE	PREV DEPTH	CUR DEPTH	FOOTAGE DRLD	ACTIVITY	PAGE 3
------	---------------	--------------	-----------------	----------	--------

SPUD

7-13-06 12321 12321 0 RIG ON. P&A WELL AS FOLLOWS:

PLUG #1 - 12321-12121	200' PLUG	60 SX "H" NEAT	BOTTOM PLUG
PLUG #2 - 11400-11300	100' PLUG	30 SX "H" NEAT	TOP OF CHESTER
PLUG #3 - 10950-10850	100' PLUG	30 SX "H" NEAT	TOP OF MORROW
PLUG #4 - 9500-9400	100' PLUG	30 SX "H" NEAT	TOP OF PENN-CANYON
PLUG #5 - 8100-8000	100' PLUG	30 SX "H" NEAT	TOP OF WOLFCAMP
PLUG #6 - 7000-6900	100' PLUG	30 SX "H" NEAT	TOP OF ABO
PLUG #7 - 4800-4800	200' PLUG	60 SX "H" NEAT	ACROSS 8-5/8" SHOE-TAGGED @ 4815'
PLUG #8 - 2500-2400	100' PLUG	30 SX "H" NEAT	BASE OF SALT
PLUG #9 - 650-600	100' PLUG	30 SX "H" NEAT	ACROSS 13-3/8" SHOE
PLUG #10 - 60' SURFACE	60' PLUG	15 SX "H" NEAT	SURFACE PLUG

FINAL REPORT

**Burns Operating
Fair "17" Fed #1
1792' FNL 727' FWL, Sec. 17-T17S-R31E
Eddy County, New Mexico
Loco Hills Prospect**

Deviation Surveys:

1°	390'
1°	600'
1°	920'
1 1/2°	1366'
3/4°	1705'
3/4°	2389'
1/2°	2735'
1°	3078'
1 1/4°	3413'
1°	3755'
3/4°	4129'
1/2°	4465'
1°	4700'
1 1/4°	5052'
3/4°	5396'
1°	5771'
3/4°	6116'
1 1/4°	6458'
1 1/2°	6801'
1 1/2°	7144'
1 3/4°	7486'
1 1/2°	7674'
1°	8226'
1 3/4°	8569'
1 3/4°	8943'
1 1/2°	9273'
1 1/2°	9424'
1 1/4°	9786'
1 1/2°	10,130'
1 1/4°	10,444'
1 1/4°	10,812'
2°	11,596'
1 1/2°	11,912'

