

S

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION OR RECOMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15-199-20,174-00:00 SEP 24 1990

County...Wallace.....FROM CONFIDENTIAL

C.SE SW. Sec.6.. Twp.12.Rge..39W East West

660 Ft North from Southeast Corner of Section
.3300..... Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

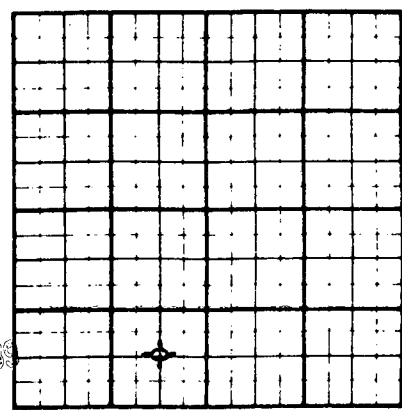
Lease Name.....Mills.....Well #...1....

Field Name.WC.....

Producing Formation.....N/A.....

Elevation: Ground.....3662.....3667.....KB.....

Section Plat



5280
4950
4620
4290
3960
3630
3300
2970
2640
2310
1980
1650
1320
990
660
330

5280
4950
4620
4290
3960
3630
3300
2970
2640
2310
1980
1650
1320
990
660
330

WATER SUPPLY INFORMATION

Disposition of Produced Water: _____ Disposal
Docket # _____ Repressuring

Questions on this portion of the ACO-1 call:

Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit #.....

Groundwater.....Ft North from Southeast Corner
(Well)Ft West from Southeast Corner of
Sec Twp Rge East West

X Surface Water.....300 Ft North from Southeast Corner
.....4500 Ft West from Southeast Corner
.....Sec 27 Twp 11 Rge 39W East X West

Mr. Arthur W. Carrol , Wallace, Kansas 67761

Other (explain).....
(purchased from city, R.W.D. #)

Operator: License # 5140
Name Frontier Oil Company
Address 125 N. Market Ste. 1720
Wichita, Kansas 67202
City/State/Zip

Purchaser.....N/A.....

Operator Contact Person Jean Angle
Phone 316-263-1201

Contractor: License # 5302
Name Red Tiger Drilling Co

Wellsite Geologist Joel A. Alberts
Phone 316-262-6391

Designate Type of Completion
X New Well _____ Re-Entry _____ Workover _____
Oil _____ SWD _____ Temp Abd _____
Gas _____ Inj _____ Delayed Comp. _____
X Dry _____ Other (Core, Water Supply etc.) _____

If OWNO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth.....

WELL HISTORY

Drilling Method:
X Mud Rotary _____ Air Rotary _____ Cable _____

6-3-89..... 6-15-89..... 6-15-89.....
Spud Date Date Reached TD Completion Date
.5230..... N/A.....
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 350 feet
Multiple Stage Cementing Collar Used? Yes X No
If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from.....feet depth to.....w/.....SX cmt
Cement Company Name
Invoice #

JUN 27 1989
OCT 27 1989
KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

ACT II
D.S.A

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Jean Angle

Title Agent Date 6-27-89

Subscribed and sworn to before me this 27th day of June 1989
Notary Public D. Ann Drennan

Date Commission Expires 2-10-90

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
KCC SWD/Rep NGPA
X KGS Plug Other (Specify)

Sec. 6 Twp. 12 Rge. 39W

Operator Name ..Frontier Oil Company..... Lease Name.....Mills.....Well #.....1...

Sec...6..... Twp...12..... Rge.....39W.. East West County.....Wallace.....RELEASED...

CONFIDENTIAL

WELL LOG

SEP 24 1990

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log. (Attached)

FROM CONFIDENTIAL

Drill Stem Tests Taken Yes No
Samples Sent to Geological Survey Yes No
Cores Taken Yes No

Formation Description
 Log Sample

Table with 3 columns: Name, Top, Bottom. Rows include Anhydrite, Howard, Topeka, Heebner, Toronto, Lansing, Base Kansas City, Cherokee, Morrow Shale, Morrow Sand, Mississippian, RTD.

CASING RECORD New Used
Report all strings set-conductor, surface, intermediate, production, etc.

Table with 8 columns: Purpose of String, Size Hole Drilled, Size Casing Set (in O.D.), Weight Lbs/Ft., Setting Depth, Type of Cement, #Sacks Used, Type and Percent Additives. Includes entry for Surface.

PERFORATION RECORD and Acid, Fracture, Shot, Cement Squeeze Record. Includes Shots Per Foot (N/A) and Specify Footage of Each Interval Perforated.

TUBING RECORD Size Set At Packer at Liner Run Yes No

Date of First Production Producing Method Flowing Pumping Gas Lift Other (explain).....

Table with 5 columns: Oil, Gas, Water, Gas-Oil Ratio, Gravity. Includes Estimated Production Per 24 Hours.

METHOD OF COMPLETION Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify)
 Used on Lease Dually Completed
 Commingled

Phone 913 483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

15-199-20174-00-00
 new

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

ALLIED CEMENTING CO., INC. N° 4114

Home Office P. O. Box 31

Russell, Kansas 67665

Date	6-15-89	Sec.	6	Twp.	12 ^s	Range	39 ^w	Called Out		On Location	4:30 ^{PM}	Job Start		Finish	7:00 ^{PM}
Lease	Mills	Well No.	1	Location	Sharon Spgs 11N-3E-25			County	Wallace	State	Kan				
Contractor	Red Tiger Digs # 10										Owner				
Type Job	Plus										To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.				
Hole Size	7 7/8		T.D.	5214			Charge To	Frontier Oil Co.							
Csg.	8 5/8		Depth	350'			Street	1437 N Franklin							
Tbg. Size			Depth				City	Russell	State	Kan 67665					
Drill Pipe			Depth				The above was done to satisfaction and supervision of owner agent or contractor								
Tool			Depth				Purchase Order No.	x Delbert Flanders							
Cement Left in Csg.			Shoe Joint				CEMENT								
Press Max.			Minimum				Amount Ordered	190 SKS 60/40 Poz, 60/6 Gel							
Meas Line			Displace				Consisting of	1/4 1Bs per SK Flo-Seal							
Perf.							Common	114	6.00	684.00					

EQUIPMENT

Pumptrk	No.	Cementer	Walt
	153	Helper	
Pumptrk	No.	Cementer	Ed
		Helper	
Bulktrk	146	Driver	
		Driver	

Quickset	Flo Seal 1.60"		48 #	76.8
Handling	90¢			171.0
Mileage	3¢		60m	342.0
			Sub Total	1530.0
			Total	

DEPTH of Job

Reference:	Pumptruck	360.00
	Plus	20.00
	1.00 per mile	60.00
	Sub Total	440.00
	Tax	
	Total	

Remarks:

- 25" SKS @ 2925'
- 100 SKS @ 1925'
- 40" SKS @ 400'
- 10 SKS @ 40'
- 15 SKS in R.H.

What You
 RECEIVED
 6/17/89
 RECEIVED
 6/17/89

Phone 313-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

15-199-20174-00-00

Phone Plainville 913-483-
 Phone Ness City 913-793-

ALLIED CEMENTING CO., INC.

No. 65

Home Office P. O. Box 31

Russell, Kansas 67665

New

Date	6-3-89	Sec.	6	Twp.	12	Range	39	Called Out	2:45 P.M.	On Location	7:40 P.M.	Job Start	10:30 P.M.
Lease	Mills	Well No.	1	Location				Sharon Springs 4N-2E-53N	County Wallace				

Contractor	Red Tigar		
Type Job	Surface		
Hole Size	12 1/4"	T.D.	350'
Csg.	8 7/8" (20#)	Depth	350'
Tbg. Size		Depth	
Drill Pipe		Depth	
Tool		Depth	
Cement Left in Csg.	15'	Shoe Joint	
Press Max.		Minimum	
Meas Line		Displace	21.8 BBL.
Perf.			

Owner	Same
To Allied Cementing Co., Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as follows:	
Charge To	Frontier Oil Co.
Street	1437 N. Franklin
City	Russell
State	Ks 67111
The above was done to satisfaction and supervision of owner agent/contractor	
Purchase Order No.	
X	Delbert Flander
CEMENT	
Amount Ordered	125 lbs 3700 - 75 Common
Consisting of	
Common	75 6.00 45
Poz. Mix	125 lbs 5.00 60
Gel.	
Chloride	6 20.00 10
Quickset	
Sales Tax	
Handling	200 .90 18
Mileage	60 36
Sub Total	
Total 173	
Floating Equipment	TOTAL \$ 2214.50
	Less Disc - 442.90
	\$ 1771.60

EQUIPMENT		
No.	Cementer	
Pumptrk 158	Helper	Mike Gary
No.	Cementer	
Pumptrk	Helper	
	Driver	Mick
Bulktrk 199	Driver	

DEPTH of Job	
Reference:	
OAKLEY Pump Jct	360.00
OAKLEY Pump Jct Mileage	60.00
TWP	40.00
50' at .39	19.50
Total 479.50	

Remarks: Cement Drill Circulates
 6 BBL Cement
 Thank you

Amount Ordered	125 lbs 3700 - 75 Common
Consisting of	
Common	75 6.00 45
Poz. Mix	125 lbs 5.00 60
Gel.	
Chloride	6 20.00 10
Quickset	
Sales Tax	
Handling	200 .90 18
Mileage	60 36
Sub Total	
Total 173	
Floating Equipment	TOTAL \$ 2214.50
	Less Disc - 442.90
	\$ 1771.60

15-199-20174-00-00

COPY

RELEASED
SEP 24 1990
FROM CONFIDENTIAL

CONFIDENTIAL

GEOLOGICAL REPORT

FRONTIER OIL COMPANY

RECEIVED
JUN 27 1989
GEOLOGICAL SURVEY
WICHITA BRANCH

RELEASED
SEP 24
FROM CONFIDENTIAL

MILLS NO. 1

C SE SW Section 6-12S-39W
WALLACE COUNTY, KANSAS

Commenced: June 3, 1989

Date of RTD: June 15, 1989

Joel A. Alberts

JUN 27 1989

KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

CONFIDENTIAL

Frontier Oil Company
 1720 Kansas State Bank Building
 Wichita, Kansas 67202

Re: Frontier Oil Company
 No. 1 Mills
 C SE SW 6-12S-39W
 Wallace County, Kansas

Dear Sir:

The following is a Geological Report with a Time Log attached on the above captioned well.

Drilling was supervised from 3600' to 5230' , rotary total depth. Samples were examined from 3600' to rotary total depth.

All formation tops, zones of porosity, and stainings are based on rotary bushing measurements. Any corrections in measurements during the drilling of this well have been incorporated into this report.

Elevation	3662 GL---3667 KB	
	<u>Log Tops</u>	
Anhydrite (Top)	2958	(+709)
Anhydrite (Base)	2990	(+677)
Howard	3986	(-319)
Topeka	4036	(-369)
Heebner	4247	(-580)
Toronto	4274	(-607)
Lansing	4294	(-627)
Stark Shale	4540	(-873)
Base of Kansas City	4650	(-983)
Cherokee Shale	4846	(-1179)
Morrow Shale	5010	(-1343)
Morrow Sand	5024	(-1357)
Mississippian	5156	(-1489)
Rotary Total Depth	5230	(-1563)
Log Total Depth	5230	(-1563)

Structurally, on top of the Lansing, the No. 1 Mills ran 57' low to the Beard Oil Company Emma Swanson No. 1, an abandon gas well located approximately 3 miles South and One and One half miles West. On top of the Morrow Shale the No. 1 Mills ran 47' low to the Emma Swanson No.1. On top of the Mississippian the No. 1 Mills ran 41' low to the Emma Swanson No. 1.

ZONES OF INTEREST

TOPEKA SAND 4088' (-421)

4088' to 4098'

Scattered grey to green micaceous siltstone, fine grained and poorly developed. No shows.

LANSING - KANSAS CITY 4294' (-627)

4294' to 4650'

Predominantly white to buff and grey fine crystalline limestone, chalky in part. Few pieces slightly fossiliferous with poor visible porosity and no show of oil.

MORROW SHALE TOP 5010' (-1343)

5024' to 5044'

Sandstone, white to light grey fine grained clusters, friable in part, well sorted, well rounded, with no shows of oil grading into a fine-medium grained, white quartz sand, well sorted and subrounded to subangular grains. Scattered large loose quartz grains. No odor, no show of oil.

5140' to 5145'

Sandstone, white to grey fine-grained well sorted, well cemented clusters with abundant fresh chert. No show of oil.

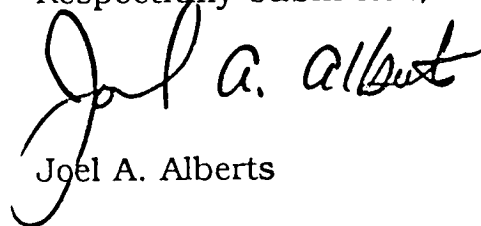
MISSISSIPPIAN TOP 5156' (-1489)

5156' to 5230

Limestone, light grey fine-medium crystalline, cherty, fossiliferous with no show of oil. Increasingly chalky toward base with fair oocastic porosity and no show.

Due to the low structural position and lack of sample shows, the Frontier Oil Company No. 1 Mills was plugged, a dry hole.

Respectfully submitted,

Handwritten signature of Joel A. Alberts in cursive script.

Joel A. Alberts

DRILLING INFORMATION ON THE NO. 1 MILLS

Drilling Contractor: Red Tiger Drilling Co. (Rig 10)
 Drillers: Fulton, Larry Barriger, Richard Flanders, Delbert
 Tool Pusher: Richard Barriger
 Spud Date: June 3, 1989
 Date of RTD: June 15, 1989
 Surface Casing: 8-5/8" @ 350' w/125 sx
 Production Casing: None

TOTAL FOOTAGE DRILLED PER DAY

under surface at 8:30 A.M. on June 4, 1989

1500	Feet	At	7:00 A.M.	On	June 5, 1989
2225	"	"	"	"	June 6, 1989
2940	"	"	"	"	June 7, 1989
3390	"	"	"	"	June 8, 1989
3765	"	"	"	"	June 9, 1989
4133	"	"	"	"	June 10, 1989
4390	"	"	"	"	June 11, 1989
4645	"	"	"	"	June 12, 1989
4880	"	"	"	"	June 13, 1989
5014	"	"	"	"	June 14, 1989
5230	"	"	"	"	June 15, 1989

BIT RECORD

<u>BITS</u>	<u>TYPE</u>	<u>FOOTAGE</u>
No. 1	Hughes J-1	350' - 1745'
No. 2	Chicago Pnematic	1745' - 5014'
No. 3	Reed HP52	5014' - 5230'

MUD RECORD - (DAVIS MUD)

Surface	30 sx gel, 10 sx Hulls, 2 sx lime
350'	38 sx gel, 10 sx Hulls, 1 sx lime
720'	49 sx gel, 35 sx Hulls, 1 sx lime
1063'	30 sx gel, 5 sx Hulls
1500'	15 sx gel, 5 sx Hulls
1970'	30 sx gel, 10 sx Hulls
2940'	18 sx gel, 2 sx Hulls
3280'	74 sx gel, 5 sx Hulls, 3 sx soda ash, 3 sx caustic, 2 sx lignite
3300'	56 sx gel, 5 sx Hulls, 2 sx soda ash, 3 sx caustic, 2 sx lignite
3400'	36 sx gel, 2 sx Hulls, 1 sx soda ash, 1 sx caustic, 1 sx lignite
3650'	20 sx gel, 5 sx Hulls
3765'	36 sx gel, 2 sx soda ash, 2 sx caustic, 2 sx lignite
3890'	1 sx caustic
4133'	1-1/2 sx desco, 1 sx Dapac, 1 sx caustic
4235'	1 sx Dapac, 3 sx Desco, 3 sx lignite
4315'	1 sx Dapac, 1/2 sx Desco, 1 sx soda ash, 1 sx caustic
4390'	1 sx Dapac, 1 sx caustic, 1 sx soda ash, 2 sx lignite
4490'	1/2 sx caustic, 1 sx lignite
4720'	10 sx gel, 1-1/2 sx caustic
4880'	10 sx gel, 1 sx Dapac, 1 sx caustic, 1 sx soda ash, 1 sx lignite
4950'	15 sx gel, 1 sx Dapac, 2 sx caustic, 1 sx soda ash
5014'	22 sx gel, 10 sx Hulls, 1 sx caustic, 1 sx soda ash, 1 sx lignite
5065'	1 sx lignite

DRILLERS TIME LOG

Frontier Oil Company
No. 1 Mills

C SE SW
6-12S-39W
Wallace County

Elev.: 3667 KB

DEPTH	MINUTES	REMARKS
1 Foot Drilling Time		
3600 to 3610	1-2-1-2-1-1-1-1-1-1	
3620	2-1-2-3-2-2-3-1-1-4	
3630	6-4-3-4-5-6-6-6-6-5	
3640	4-4-5-6-5-5-6-2-3-4	
3650	3-4-3-4-4-5-4-4-4-5	
3660	5-4-5-4-3-3-2-2-1-2	
3670	2-1-2-2-2-2-3-5-4-4	
3680	5-4-5-4-4-4-4-4-4-5	
3690	5-5-5-5-5-5-5-4-5-5	
3700	4-4-4-4-4-4-5-5-5-3	
3700 to 3710	5-5-5-5-6-5-5-5-5-5	
3720	5-5-5-5-4-5-6-5-5-5	
3730	3-3-4-5-6-6-7-2-1-2	
3740	1-1-1-2-2-2-2-2-2-1	
3750	2-3-3-3-3-3-2-2-3-6	
3760	5-5-4-4-4-5-6-5-5-5	
3770	5-5-4-3-4-5-4-5-3-4	
3780	4-4-5-5-4-4-4-5-4-5	
3790	3-3-3-3-2-2-2-3-3-1	
3800	2-1-1-1-1-2-2-2-2-2	
3800 to 3810	3-3-4-3-3-4-3-4-6-3	
3820	3-3-5-4-5-4-5-4-2-3	
3830	3-2-2-3-4-3-4-4-3-3	
3840	4-4-4-5-5-5-5-5-3-3	
3850	4-2-3-3-3-4-3-4-2-3	
3860	3-2-2-3-4-6-3-4-3-4	
3870	2-3-4-4-1-1-2-3-3-2	
3880	1-1-4-4-4-3-4-4-5-3	
3890	5-3-3-2-3-3-4-3-4-3	
3900	3-3-4-3-3-3-3-4-3-3	
3900 to 3910	3-3-4-3-3-4-2-3-5-3	
3920	3-2-1-4-2-5-4-4-4-4	

DEPTH	MINUTES	REMARKS
3930	3-5-6-5-5-5-6-4-4-5	
3940	4-5-4-5-6-6-7-4-4-5	
3950	6-5-7-7-5-3-4-4-3-3	
3960	3-3-4-4-2-2-2-2-2-3	
3970	4-4-3-4-3-4-3-2-2-4	
3980	4-4-4-3-4-4-2-3-4-3	
3990	3-2-3-4-4-3-1-2-3-4	
4000	5-5-4-4-4-2-4-3-4-5	
4000 to 4010	5-4-5-5-4-4-4-3-5-5	
4020	4-4-5-5-4-3-2-2-3-3	
4030	1-3-4-4-4-5-4-3-4-3	
4040	4-4-3-3-4-4-3-3-4-3	
4050	3-4-5-4-4-4-4-4-2-2	CFS (4050')
4060	4-4-2-2-3-5-4-3-5-5	
4070	2-3-4-4-4-4-4-3-4-3	
4080	3-3-3-3-3-2-2-3-2-2	
4090	3-2-3-2-3-2-2-1-2-2	
4100	2-2-3-2-3-4-6-5-3-3	
4100 to 4110	3-2-2-1-1-1-1-1-1/2-1/2-1	
4120	1-1-2-2-1-2-2-1-2-1	
4130	1-2-2-3-5-5-3-3-4-5	
4140	5-4-2-5-4-4-4-5-5-6	
4150	4-3-5-5-4-5-4-4-3-4	
4160	3-4-4-5-3-4-6-5-5-5	
4170	5-3-2-4-3-4-4-4-4-5	
4180	6-6-5-5-5-4-4-5-5-4	
4190	6-5-5-4-4-6-5-5-6-6	
4200	7-6-6-6-8-3-5-5-5-4	
4200 to 4210	4-5-5-6-4-4-5-4-2-2	
4220	1-2-2-2-2-3-3-6-5-4	
4230	3-2-3-5-8-3-3-4-3-2	
4240	2-2-1-4-3-5-6-7-6-7	
4250	6-6-6-6-6-5-6-6-5-4	
4260	3-3-4-5-5-6-5-5-2-4	
4270	5-5-5-5-5-5-6-7-6-5	
4280	7-5-5-4-5-6-4-4-3-2	
4290	4-4-5-5-6-5-6-3-5-4	
4300	7-7-7-7-4-4-3-3-4-4	
4300 to 4310	3-4-5-5-5-4-3-3-4-3	
4320	3-3-4-2-3-6-7-6-6-6	
4330	6-6-5-8-6-3-8-8-8-8	
4340	6-6-3-3-5-5-4-3-4-3	
4350	3-6-6-6-6-8-8-7-7-6	
4360	6-2-3-5-4-3-3-4-5-4	

15-199-20174-00-00

DEPTH	MINUTES	REMARKS
4370	4-4-5-5-3-5-4-4-5-4	
4380	5-6-5-5-5-7-7-7-6-7	
4390	6-7-5-5-6-6-7-6-7-5	
4400	5-5-5-6-8-5-5-5-6-4	
4400 to 4410	2-3-4-4-4-5-4-4-6-4	
4420	5-5-3-3-3-3-3-5-4-4	
4430	4-4-5-3-2-3-3-3-3-3	
4440	3-3-3-3-3-3-3-2-3-2	
4450	3-4-4-5-5-5-5-5-5-5	
4460	5-3-4-3-5-5-7-6-5-5	
4470	6-6-5-5-5-4-3-2-4-4	
4480	4-3-2-3-4-5-3-4-4-4	
4490	5-5-5-6-5-5-5-5-6-5	
4500	7-6-6-6-6-5-6-5-6-5	
4500 to 4510	5-5-5-7-6-2-5-4-6-6	
4520	5-5-6-6-7-8-6-6-7-8	
4530	8-8-9-5-6-6-4-2-2-2	
4540	3-3-2-3-4-5-3-3-6-6	
4550	2-5-5-5-4-4-3-5-5-5	
4560	6-5-7-7-6-8-6-5-5-5	
4570	6-8-7-6-6-2-3-4-3-4	
4580	4-3-5-7-4-6-7-6-5-4	
4590	4-5-6-6-5-7-7-7-6-8	
4600	8-8-8-7-6-8-8-9-9-4	
4600 to 4610	2-3-5-7-6-8-8-5-5-5	
4620	5-5-3-4-3-3-4-8-6-6	
4630	6-5-8-9-9-6-6-7-6-7	
4640	3-3-2-4-5-7-7-5-6-5	
4650	5-6-7-7-6-5-5-7-8-7	
4660	7-7-4-2-3-5-4-5-5-4	
4670	5-3-5-5-5-4-5-5-6-7	
4680	6-7-6-6-6-5-6-5-7-7	
4690	8-6-6-5-3-4-6-6-6-6	
4700	6-5-3-4-6-6-6-4-8-7	
4700 to 4710	7-8-6-8-7-7-9-10-11-6	
4720	9-7-6-6-7-7-7-6-5-6	
4730	7-7-9-6-1-7-4-4-4-6	
4740	4-3-7-5-6-5-6-5-7-6	
4750	8-7-7-5-5-8-7-7-5-6	
4760	6-7-6-7-7-7-2-5-4-4	
4770	4-3-3-4-4-4-5-5-6-5	
4780	5-3-5-6-7-7-7-4-6-6	
4790	6-7-8-8-6-7-5-8-6-4	
4800	4-4-5-7-6-6-5-7-5-4	

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DEPTH	MINUTES	REMARKS
4800 to 4810	4-5-5-7-5-6-5-4-4-6	
4820	8-7-7-7-8-8-8-5-7-4	
4830	4-5-4-6-6-6-5-6-8-7	
4840	6-6-5-5-6-6-6-6-7-5	
4850	5-6-6-8-5-8-5-4-6-6	
4860	4-5-4-5-4-5-3-3-6-5	
4870	3-3-4-4-7-5-6-9-5-7	
4880	5-5-5-8-6-6-8-8-7-7	
4890	7-6-8-7-8-5-6-9-7-6	
4900	6-6-6-6-6-6-7-8-8-8	
4900 to 4910	8-10-6-7-7-6-8-5-7-5	
4920	6-8-8-6-7-7-5-8-8-9	
4930	8-7-6-6-8-7-7-8-8-7	
4940	6-4-3-5-5-5-7-8-6-8	
4950	6-4-4-7-6-5-8-7-7-7	
4960	9-7-7-7-7-4-6-6-5-5	
4970	6-6-5-7-7-6-6-5-8-6	
4980	5-4-7-4-5-5-8-5-5-6	
4990	5-6-5-6-7-9-8-6-7-7	
5000	5-4-3-4-6-7-7-6-5-8	
5000 to 5010	4-10-5-8-7-7-9-7-5-4	
5020	7-8-4-6-4-4-4-3-6-5	Bit Trip (5014')
5030	5-4-3-1-1-3-3-6-3-2	CFS (5020')
5040	2-3-2-2-3-9-7-5-5-5	CFS (5040')
5050	2-3-2-2-3-3-3-3-2-3	
5060	3-3-3-3-3-3-2-3-4-3	
5070	4-4-4-5-2-8-4-4-5-4	
5080	4-4-5-5-5-6-5-5-4-4	
5090	6-5-5-4-4-5-5-5-5-5	
5100	6-4-4-4-6-4-7-6-7-4	
5100 to 5110	5-5-6-6-4-7-5-6-5-5	
5120	7-5-6-5-5-6-6-7-1-4	CFS (5120')
5130	6-7-4-5-7-7-4-7-3-6	
5140	3-5-4-4-3-3-3-3-4-4	
5150	2-3-3-3-3-3-3-3-2-3	
5160	3-3-2-4-3-4-5-1-4-4	
5170	2-4-4-4-5-4-4-5-7-5	
5180	5-5-5-5-4-6-6-6-5-5	
5190	7-5-5-5-6-8-6-5-6-4	
5200	4-5-4-3-5-4-4-3-4-4	
5200 to 5210	4-4-4-4-5-4-5-4-4-3	
5220	2-4-4-3-3-5-4-4-4-2	
5230	3-3-3-4-4-4-4-4-4-4	CFS (5230')