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H. W. ADDINGTON & ASSOC.

STATE 3252-16-7

SW/NE Sec. 16-32S-52W

Las Animas County, Colorado

JOSEPH R. CLAIR
Geological Consultant
C.P.G. #713

WELL SUMMARY

Operator: H. W. Addington & Assoc.

Well: State 3252-16-7

Location: SW/NE Section 16, Township 32 South, Range 52 West,
Las Animas County, Colorado.

Field: Wildcat

Elevation: 5386' Ground, 5397' K.B.

Spudded: December 21, 1974. (Rig shut down for Christmas December 23,
24, 25, and 26.)

Completed: Finished drilling at 6:15 P.M., December 31, 1974.

Casing: 10 3/4" surface casing set at 332' K.B. measurement.

Cores: None.

Drill Stem Tests: None.

Total Depth: 1800' - Driller
Schlumberger logged to 1774' inside drill pipe.

Logs: Drilling Time Log - 340' to 1800'
Detailed Sample Log - 332' to 1800'

Schlumberger:
Sidewall Neutron Porosity Log - Surface casing to 1220'
Gamma Ray-Neutron Log - 900' to 1774' (run inside
drill pipe).

Mud Logging: Monaco Engineering, Inc. - Leon Hancock, Logging Engineer.

Air Drilling
Equipment: 2 Ingersoll-Rand 1500 CFM Compressors using air-mud-mist.
Jim Heinen, Engineer.

Contractor: Signal Oilfield Services, Inc. - Rig #8
Buck Taylor - Tool Pusher

Equipment: Mast: Ideco 96' telescoping derrick - 212,000# capacity
with 8' wide, 15' long, 10' high substructure
with 3' folding wings.
Drawworks: Ideco H-37, Drive-in with double drum.
Power: One 8V-71 GMC diesel motor - 250 HP through Allis
torque converter.
Pump: Gardner-Denver FXK - 14" x 5 1/2"
Power: Two 671 GMC diesel engines.
Drill Collars: 20 - 6" x 2 1/4" x 30"
Drill Pipe: 3 1/2" IF

Status: Plugged and abandoned January 4, 1975.

WELL CHRONOLOGY

H. W. ADDINGTON & ASSOC.
STATE 3252-16-7
SW/NE Sec. 16-32S-52W
Las Animas County, Colorado
Elevation: 5397' K.B.

1974

- Dec. 21 Spudded 15" hole at 9:00 P.M. with Ingersoll-Rand air hammer.
- Dec. 22 Drilled to 137' at 12:00 midnight.
- Dec. 23 Drilled to 335' at 1:00 A.M. Ran 12 joints of 10 3/4", 32.75#, new beveled surface casing with 3 centralizers and slip shoe at 332' K.B. measurement. Cemented with 150 sacks Halcolite plus 3% calcium chloride and 125 sacks of Class H cement plus 3% calcium chloride. Bumped plug at 10:45 A.M. Shut rig down for Christmas.
- Dec. 24 to
Dec. 26 Shut down for Christmas.
- Dec. 27 Drilled out from under surface at 10:55 P.M.
- Dec. 28 Drilling @ 680' at 8:30 A.M. Trip for bit at 1179'. Tested Glorietta open hole. Had 28 units on Chromatograph. Too small to measure on orifice meter. Tried to get sample; bottle failed to hold.
- Dec. 29 Drilling @ 1289' at 8:00 A.M. Lost returns at 1617'. Pulled 10 stands; had full returns. Went in two stands at a time. Had full returns to 1617'. Drilled 1617' to 1743' blind.
- Dec. 30 Decision made to ream from 1179' to 1743' and run 7" casing. Going in hole with 9 7/8" bit to ream at 8:00 A.M. Reaming from 1179' at 9:15 A.M.
- Dec. 31 Reamed to 1705' at 2:00 A.M. Bit worn out. Circulated 30 minutes; had no foam. Finally got hole circulated and started out of hole at 4:30 A.M. Out of hole at 7:45 A.M. Broke brake handle breaking out bit. Waiting on welder at 8:00 A.M. Due to misunderstanding instead of logging tool pusher went back in hole with bit; had full returns. Cleaned out 7 7/8" hole and drilled ahead to 1800' T.D. Reached T.D. at 6:15 P.M. Circulated 15 minutes and started out of hole. Brake out cathead fell off with two stands of drill collars out. Had to jury rig and break out remaining collars with main drum. Finally got out of hole at 11:00 P.M. Rigged up Schlumberger and started in to log. Dual induction tool hit bridge at 1650' and would not go. Came out of hole.

1975

- Jan. 1 Thawing out equipment at 8:00 A.M. Cleaning out at 9:00 A.M.

- Jan. 2 Reaming hole to 9 7/8" at 8:00 A.M. Reaming at 1698' at 1:00 P.M. Reamed to 1705' and bit wore out. Came out of hole and went in with 7 7/8" bit and cleaned out to T.D. Tried to run logs but could not get to bottom. Came out of hole and started back in with drill pipe open and with a two tooth mill shoe.
- Jan. 3 Going in at 1730' at 9:30 A.M. Ran Gamma Ray Neutron Log, surface casing to 1220'. Preparing to run Gamma Ray-Neutron Log inside drill pipe at 12:00 noon. Logged 900' to 1701'. Came out, laid down plugged joint. Went back in hole with 6 1/8" out of gauge button bit on drill pipe. Hit bridge at 1400'. No returns; dry drilled to 1740'. Got full returns then lost them again. Cleaned out to T.D. at 9:00 P.M. Rigged up Schlumberger and started in to log through drill pipe at 9:50 P.M. Logged 1774' to 900' with Gamma Ray-Neutron. Finished logging at 10:20 P.M. Got logs at 11:00 P.M. Called Denver.
- Jan. 4 Geologist returned to Denver and delivered logs. Well plugged with 50 sack cement plug across top of Glorietta, a 25 sack cement plug in bottom of surface and 10 sack cement plug in top of surface casing. Finished plugging at 6:00 P.M.

GEOLOGICAL REPORT

H. W. ADDINGTON & ASSOC.

STATE 3252-16-7

SW/NE Sec. 16-32S-52W

Las Animas County, Colorado

Elevation: 5397' K.B.

The State 3252-16-7 was spudded at 9:00 P.M., December 21, 1974. 15" hole was drilled with Ingersoll-Rand air hammer. Drilled to 335' at 1:00 A.M., Dec. 23. Ran 12 joints of 10 3/4", 32.75#, new beveled end casing with 3 centralizers and slip shot at 332' K.B. measurement. Cemented with 150 sacks of Halco Liteweight and 125 sacks of Class II cement plus 3% calcium chloride. Bumped plug at 10:45 A.M. and shut rig down for Christmas.

The well went out from under surface at 10:55 P.M., December 27, 1974 using air-mud-mist.

The following formation tops, corrected to Schlumberger Electric Logs, were picked on the well.

Cretaceous System:			
Dakota	-	Behind casing	
Jurassic System:			
Morrison	-	Behind casing	
Wanakah	-	Behind casing	
Entrada-Ocate	-	424	(+4973)
Triassic System:			
Santa Rosa	-	594	(+4893) ?
Permian System:			
Day Creek	-	802	(+4595) (E. log only)
Blaine	-	1013	(+4384)
Glorietta	-	1092	(+4305)
Isco	-	1376	(+4021) ?
Pennsylvanian System:			?
Madera Clastic	-	1507	(+3890) ?
Lower Madera Arkose	-	1586	(+3811)
Precambrian Granite	-	1746	(+3651)

Total Depth - 1800 Driller

The State 3252-16-7 was the fifth in a series of ten wells being drilled in Las Animas County, Colorado, by H. W. Addington & Assoc. for the Weyerhaeuser Company and others.

The test ran extremely high structurally on the upper markers (Day Creek, Blaine and Glorietta) in relation to the State 3251-36-14 (from 738' to 809'). The Glorietta again indicated the presence of CO₂ gas. While making bit trip from 1179' there was a 28 unit kick on the Chromatograph. The well was left open and an orifice meter was rigged on the blooie line. However, the volume through 1/8" orifice was too small to gauge. A sample was collected but subsequently a valve broke off the gas bottle and the sample was lost.

The presence of the Pennsylvanian Madera Clastics (?) and Lower Madera Arkose so high up on the uplift was quite unexpected, since this sequence was absent in the Federal 3253-14-12, five miles to the west. The structural position of the test was even higher on the Lower Madera Arkose (1163'), than on the upper markers. However, the absence of any carbonates in the State 3251-16-7 was quite surprising, particularly since they were present in the Federal 3253-14-12 which was slightly higher in structural position.

Due to hole conditions it was impossible to run the normal suite of logs. The bottom part of the hole had to be logged inside drill pipe and only a Gamma Ray-Neutron Log could be run.

After running logs permission to plug and abandon was given, and the hole was plugged according to instructions from the State Plugging Engineer in the following manner. A 50 sack cement plug was spotted across the top of the Glorietta above and below 1092'. A 25 sack cement plug was placed in bottom of the surface casing from 332' up and a 10 sack cement plug was placed in the top. Plugging was completed on January 4, 1975.

Joseph R. Clair
Joseph R. Clair
Geological Consultant
C.P.B. #713

February 7, 1975

DETAILED SAMPLE LOG

H. W. ADDINGTON & ASSOC.
STATE 3252-16-7

SW/NE Sec. 16-32S-52W
Las Animas County, Colorado
Elevation: 5397' K.B.

Sample study starts in Jurassic (Wanakah). Drilling with air-mud-mist.

- 332-338 Limestone, gray, very finely crystalline, dense, nodular.
- 338-357 Shale, red, hard; with interbedded Limestone, as above.
- 357-360 Shale, red and dark red, hard, some silty.
- 360-376 Shale, as above; with interbedded Limestone, gray, gray-white, very finely crystalline, dense, nodular.
- 376-385 Limestone, gray, gray-white, very finely crystalline, dense, nodular; some imbedded, very fine sand grains.
- 385-403 Shale, red, dark red, maroon, hard; with interbedded Limestone, as above.
- 403-410 Sandstone, red, purple-red, gray-white, very very fine to very fine, angular, very tightly cemented.
- 410-411 Shale, as above.
- 411-420 Limestone, gray, gray-white, very finely crystalline, very dense, very nodular; little with imbedded, very fine sand grains.
- 420-424 Shale, red, dark red, trace maroon, hard.
- 424 Entrada-Ocate (+4973)
- 424-442 Sandstone, gray-white, purple-red, dark red, very fine to fine, angular to subangular and little subrounded, very tight, most dirty.
- 442-444 Shale, purple-gray, pale green-gray, hard, clayey.
- 444-453 Sandstone, as above; most dark red.
- 453-463 Shale, as above; with interbedded Sandstone, as above.
- 463-475 Sandstone, gray-white, red, very fine to fine, angular to subangular, very tight, most very dirty.
- 475-477 Shale, purple-gray, pale green-gray, hard, clayey.
- 477-490 Sandstone, as above.

- 490-495 Shale, as above.
- 495-526 Sandstone, gray-white, dark red, dark purple-red, very fine to fine, angular to subangular, very tight, most very dirty; with interbedded Shale, pale green-gray, purple-gray, mottled, hard, clay; little very finely sandy.
- 526-528 Shale, red, brown-red, hard to soft, very finely sandy.
- 528-543 Sandstone, as above.
- 543-556 Shale, pale green-gray and varicolored, hard, clay; considerable very finely sandy.
- 556-587 Sandstone, gray-white, red, dark red, very fine to fine, angular to subangular, very tight, most dirty.
- 587-594 Shale, as above, much mottled.
- 594 Top - TRIASSIC (SANTA ROSA ?) (+4803)
- 594-630 Sandstone, brown-red, dark red, red, very fine to fine, angular to subrounded, very tight, very dirty, some quite shaly.
- 630-677 Sandstone, brown-red, red, dark red, very fine to fine, angular to subrounded, very tightly cemented, very poorly sorted; most is quite shaly with some dark red Shale ? interbedded.
- 677-683 Shale, dark brown-red, hard, little silty to very, very finely sandy.
- 683-714 Sandstone, brown-red, very very fine to very fine, angular, micromicaceous, very tight, very shaly; with some interbedded Shale, dark brown-red, hard 695-98.
- 714-732 Shale, dark brown-red, hard; some silty to very, very finely sandy.
- 732-735 Siltstone to very, very fine Sandstone, brown-red, micromicaceous, very tight, dirty and shaly.
- 735-742 Shale, dark chocolate, very hard.
- 742-771 Siltstone to very, very fine Sandstone, as above.
- 771-775 Shale, as above.
- 775-782 Sandstone, brown-red, dark red, very very fine to little fine, angular, micromicaceous, very tight, shaly; few fine to medium, subrounded floating grains.
- 782-802 Shale, dark chocolate, dark brown-red, very hard.
- 802 Top - DAY CREEK (+4595) (Electric log only)
- 802-837 Dolomite ? Note: No dolomite of Day Creek lithology was found in the samples.

- 837-858 Shale, dark chocolate, dark red, very hard, little micromicaceous; trace of pale orange-buff and red, dense, dolomite nodules and interbedded Sandstone, orange-brown, very very fine, angular, micromicaceous, very tight, some shaly 851-56.
- 858-874 Sandstone, brown-red, orange-brown, very very fine, angular, micromicaceous, very tight, some shaly.
- 874-882 Shale, dark chocolate, hard, little micromicaceous; trace buff and varicolored, dense, dolomite nodules.
- 882-890 Sandstone, brown-red, orange-brown, pale purple, very very fine to very fine, angular, micromicaceous, very tight, some shaly.
- 890-893 Shale, as above.
- 893-908 Siltstone to very fine Sandstone, brown-red, orange-brown, micromicaceous, very tight, some shaly.
- 908-910 Shale, dark chocolate, hard, little micromicaceous; trace buff and varicolored, dense, dolomite nodules.
- 910-918 Siltstone to very fine Sandstone, orange-brown, brown-red, micromicaceous, very tight, some shaly.
- 918-935 Shale, dark chocolate, dark brown-red.
- 935-948 Sandstone, brown-red, dark orange-brown, very fine, angular, micromicaceous, very tight, some shaly.
- 948-951 Shale, as above.
- 951-959 Siltstone to very fine Sandstone, as above; most Siltstone.
- 959-962 Shale, dark brown-red, dark chocolate, hard.
- 962-985 Siltstone to very fine Sandstone, dark orange-brown, brown-red, micromicaceous, very tight; some shaly with some interbedded Shale, as above.
- 985-999 Shale, as above.
- 999-1006 Siltstone to very fine Sandstone, orange, dark orange-red, some micromicaceous; little with white, intergranular Clay or Gypsum. Noté: This is first good Permian lithology found in the samples.
- 1006-1013 Shale, orange-red, dark red.
- 1013 Top - BLAINE (+4384)
- 1013-1022 Dolomite, white, pale orange-buff, pale red-gray mottled, pale purple, very finely crystalline to finely crystalline, dense; trace white, satiny and soft Gypsum.
- 1022-1023 Shale, orange-red, dark red.

- 1023-1032 Anhydrite, gray-white, little red-gray, slightly crystalline to massive, very dense; with little Dolomite, as above.
- 1032-1034 Shale, dark red, some with green spots, very hard.
- 1034-1059 Anhydrite, white, gray-white, traces varicolored, finely crystalline to massive, dense; with some interbedded Dolomite, gray, very finely crystalline, very dense.
- 1059-1092 Shale, dark red, chocolate, red with green spots, very hard; with interbedded Siltstone to very fine Sandstone, orange, dark orange-red, dark red, micromicaceous; and some intergranular Clay or Gypsum.
- 1092 Top - GLORIETTA (+4305)
- Note: Samples are very poor throughout Glorietta.
- 1092-1135 Sandstone, gray-white, some scattered orange grains, very fine to medium and little coarse, angular to subangular and some subrounded floating grains, both clear and frosted; friable (all loose grains); traces of Pyrite.
- 1135-1142 Shale, light orange-red, red, dark red, hard.
- Note: Lost sample returns briefly at 1140; had only air.
- 1142-1171 Sandstone, gray-white, very fine to medium, angular to subangular and some subrounded; with considerable medium to coarse, subrounded floating grains, most loose; few cemented aggregates are slightly lime cemented.
- 1171-1180 Siltstone to very fine Sandstone, orange-red, orange, micromicaceous, very tight.
- Note: Had CO₂ gas kick while making trip at 1179.
- 1180-1185 Shale, dark orange, orange-red, hard.
- 1185-1224 Sandstone, gray-white, pink, pale orange, very fine to fine, angular to subangular, tight to slightly friable, slightly limey; with interbedded Siltstone to very fine Sandstone, orange-red, dark orange, micromicaceous, tight, dirty.
- 1224-1229 Shale, light red, dark red, orange-red, hard.
- 1229-1241 Siltstone to very fine Sandstone, orange-red, orange, micromicaceous, tight, dirty.
- 1241-1276 Sandstone, gray-white, pale pink, pink-red, very fine to fine, angular to subangular, very tight, slightly limey; little Pyrite; with interbedded Siltstone to very fine Sandstone, as above.
- 1276-1278 Shale, light red to red, hard.
- 1278-1312 Sandstone, gray-white, pale orange, fine to medium and little coarse, angular to subangular and little subrounded, very tight; with considerable

- intergranular cement; very slightly limey; with some interbedded Siltstone to very, very fine Sandstone, orange-red, orange, light red, micromicaceous, tight, dirty.
- 1312-1314 Shale, red, dark red, chocolate, hard.
- 1314-1339 Sandstone, as above; most pale orange and orange; trace Pyrite; with interbedded Siltstone to Sandstone, as above.
- 1339-1342 Shale, chocolate, red, dark red, hard.
- 1342-1354 Sandstone, pale orange, orange, gray-white, fine to medium, angular to subangular, tight; with considerable intergranular cement; few medium to coarse, subangular to subrounded grains, slightly limey.
- 1354-1355 Shale, as above.
- 1355-1362 Siltstone to very, very fine Sandstone, orange-red, red, micromicaceous, tight, dirty.
- 1362-1364 Shale, chocolate, red, dark red, hard.
- 1364-1376 Sandstone, as above; more medium and coarse, subangular and subrounded grains.
- 1376 Top - YESO (+4021) ?
- 1376-1378 Shale, chocolate, dark purple, purple-red, hard; some with imbedded sand grains; little micromicaceous.
- 1378-1394 Siltstone, dark purple-red, chocolate, micromicaceous.
- 1394-1396 Shale, as above.
- 1396-1428 Siltstone to very, very fine Sandstone, light red, chocolate, purple, micromicaceous; some with imbedded fine sand grains.
- 1428-1433 Sandstone, light red, red, very very fine to very fine, angular, tight, silty, dirty, limey; with some fine, angular to subangular floating grains imbedded.
- 1433-1480 Siltstone to very fine Sandstone, light red, red, angular, tight, dirty, slightly limey, some silty.
- 1480-1482 Shale, chocolate, dark purple-red, dark red, hard, some micromicaceous.
- 1482-1505 Siltstone to Sandstone, red, light red, very fine to medium, angular to subangular, very tight, dirty, limey; trace pink-red, red, very finely crystalline, dense, nodular Dolomite.
- 1505-1507 Shale, chocolate, dark purple-red, red, dark red, some micromicaceous, hard.
- 1507 Top - PENNSYLVANIAN (MADERA CLASTIC (+3890) ?
- 1507-1516 Siltstone to Sandstone, light red, orange-red, pale purple, red, chocolate, very very fine to fine and few medium grains, angular to slightly

subangular, micromicaceous, slightly dolomitic, quite dirty; with trace Dolomite, red, pink, purple, very finely crystalline, dense, silty, nodular (looks conglomeratic in part).

- 1516-1545 Siltstone to Sandstone, highly varicolored, very very fine to medium and trace coarse grains, angular to subangular, tight, dirty, micromicaceous, slightly dolomitic (quite conglomeratic in appearance); little varicolored, dense, nodular Dolomite.
- 1545-1550 Shale, chocolate, dark purple-red, hard.
- 1550-1563 Siltstone to conglomeratic Sandstone, as above; more varicolored; some very coarse Quartz grains; trace varicolored Dolomite nodules, as above.
- 1563-1585 Siltstone to Sandstone, orange, dark orange, trace red, very very fine to very fine, micromicaceous, tight, dirty; with little varicolored, fine to coarse, slightly dolomitic, very tight, dirty, conglomeratic Sandstone, as above; interbedded trace coarse Arkosic grains.
- 1585-1586 Shale, chocolate, dark red, hard; with trace pale purple, red, dark red, very finely crystalline, dense, nodular Dolomite.
- 1586 Top - LOWER MADERA ARKOSE (+3811)
- 1586-1606 Arkose, pink, red, orange, pale orange, coarse to very coarse, weathered, tight; and Quartz Wash conglomerate.
- 1606-1608 Shale, as above.
- 1608-1616 Arkose and Quartz Wash conglomerate, as above.
- Lost returns at 1617. Drilled blind from 1620 to 1742. Reamed 7 7/8" hole to 9 7/8" from 1179 to 1705. Reaming samples were caught from 1680 to 1705 and were composed of Granite Wash, Quartz Wash, pink, red, pale orange, angular to subangular and slightly subrounded, medium to coarse grained; most wash was weathered. Quartz Wash grains were clear to frosted, some colored. Bit wore out at 1705 and by mistake, instead of logging at that point as had been intended, the tool pusher went back in the hole with 7 7/8" bit. Full returns were recovered and drilling proceeded.
- 1742-1746 Granite Wash, red and pink; and Quartz Wash, medium to coarse, subangular to subrounded, slightly weathered; some pink and orange Feldspar grains.
- 1746 Top - PRECAMBRIAN GRANITE (+3651)
- 1746-1758 Granite, red, pink, orange, medium to coarse textured, slightly weathered to fresh; few very coarse, fresh Feldspar crystals.
- 1758-1800 Granite, red, orange, pink, coarse to very coarse textured, little slightly weathered but most fresh.
- 1800 Total depth - Driller.

Note: Schlumberger Gamma Ray-Neutron Log was run inside drill pipe and reached only to 1772' because pipe was picked up off bottom.

Note: Sample quality varied from very, very poor to fair. As a result parts of this Detailed Sample Log are highly interpretative. Further, the quality of the electric logs is very poor below 1200'.

Samples described:

Joseph R. Clair
JOSEPH R. CLAIR
(on well)

DRILLING TIME LOG

H. W. ADDINGTON & ASSOC.
STATE 3252-16-7

SW/NE Sec. 16-32S-52W
Las Animas County, Colorado
Elevation: 5397' K.B.

5' drilling time starts at 335'.

335- 400	5-5-5	11-7-12-3-5-9-5-3-5-8
400- 500	5-3-3-3-2-3-3-2-2-2	4-3-15-6-5-4-5-5-3-5
500- 600	7-7-5-2-2-2-2-3-3-4	4-3-2-2-2-3-4-3-3-2
600- 700	3-2-3-3-3-3-3-2-2-3	3-3-3-5-3-3-2-2-1-2
700- 800	2-2-2-2-1-2-2-3-3-2	3-3-4-3-2-3-5-4-5-2
800- 900	3-5-2-5-5-4-4-3-2-3	2-4-5-3-3-5-6-5-3-3
900-1000	2-6-5-4-4-3-5-3-2-2	2-2-2-4-5-4-3-6-5-5
1000-1100	4-4-4-6-5-6-12-7-8-10	8-7-7-5-11-6-8-7-4-7
1100-1200	13-8-3-5-4-6-7-8-6-7	10-7-10-5-8-7-7-8-9-7
1200-1300	7-7-7-5-5-3-2-5-4-3	7-5-5-5-5-4-5-5-5-11
1300-1400	9-3-6-6-5-4-4-3-7-5	5-7-6-7-7-6-6-5-5-5
1400-1500	3-6-5-5-3-7-9-6-4-5	5-4-3-3-5-3-4-5-4-4
1500-1600	4-4-4-6-10-4-5-5-3-4	6-4-5-5-4-4-4-2-4-4
1600-1700	4-3-3-4-5-6-5-3-5-4	4-4-5-3-6-10-8-13-8-20
1700-1740	17-8-17-14-17-18-13-24-25	

1' drilling time from 1740' to 1800'.

1740-1760	5-5-4-4-3-4-6-6-6-7	6-6-3-3-4-6-3-6-5-5
1760-1780	4-3-4-4-4-4-4-5-5-3	3-3-5-3-2-4-8-6-6-6
1780-1800	6-5-7-5-7-7-6-5-6-6	5-5-5-4-4-4-4-5-5-7

1800 Total depth.

BIT RECORD

H. W. ADDINGTON & ASSOC.

STATE 3252-16-7

SW/NE Sec. 16-32S-52W

Las Animas County, Colorado

Elevation: 5397' K.B.

<u>Run No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth out</u>	<u>Feet</u>	<u>Hours</u>
1	15"		(Retip)	335	335	14
1	9 7/8	Sec.	S4TJ	1179	844	15 1/2
2	7 7/8	HTC	J-33	1743	564	15 1/2
3	9 7/8	Sec.	S4J	1705	526	Reaming from 1179-1705
4	7 7/8	HTC	J-33 (Rerun Bit #2)	1800	57	5