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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/26/2003	24P-400-405	400.00	405.00	Bedrock: Pale brown crystal (quartz & feldspar) - rich tuff. Abundant oxybio & glass shards to 470 ft. Oxybio: "Golden bronze" oxidized biotite. Note 2mm x 3mm lithic fragment with 1mm white (bleached?) reaction rim.
7/26/2003	24P-405-410	405.00	410.00	Oxybio: "Golden bronze" oxidized biotite. At 420 ft the drillers recovered a small amount of wettened clean-out material.
7/26/2003	24P-410-415	410.00	415.00	Oxybio: "Golden bronze" oxidized biotite.
7/26/2003	24P-415-420	415.00	420.00	Oxybio: "Golden bronze" oxidized biotite. H2O at 420 ft. Rig up to drill wet (2 "pies" initially); sample 415-420 ft is wet.
7/26/2003	24P-420-425	420.00	425.00	Oxybio: "Golden bronze" oxidized biotite. Sanidine: chatoyant/opalescent feldspar.
7/26/2003	24P-425-430	425.00	430.00	Oxybio: "Golden bronze" oxidized biotite.
7/26/2003	24P-430-435	430.00	435.00	Oxybio: "Golden bronze" oxidized biotite. Slight darkening. Rock is crudely laminated.
7/26/2003	24P-435-440	435.00	440.00	Oxybio: "Golden bronze" oxidized biotite. Sanidine: chatoyant/opalescent feldspar.
7/26/2003	24P-440-445	440.00	445.00	Oxybio: "Golden bronze" oxidized biotite. Sanidine: chatoyant/opalescent feldspar. Rock is crudely laminated.
7/26/2003	24P-445-450	445.00	450.00	Oxybio: "Golden bronze" oxidized biotite. Rock is crudely laminated.
7/26/2003	24P-450-455	450.00	455.00	Note increase in lithic fragments and decrease in quartz & feldspar content from 450 ft downward.
7/26/2003	24P-455-460	455.00	460.00	Oxybio: "Golden bronze" oxidized biotite. Sanidine: chatoyant/opalescent feldspar. Slight darkening. Note 2mm x 3mm lithic fragment with 1mm white (bleached?) reaction rim.
7/26/2003	24P-460-465	460.00	465.00	Oxybio: "Golden bronze" oxidized biotite.
7/26/2003	24P-465-470	465.00	470.00	Oxybio: "Golden bronze" oxidized biotite. Sanidine: chatoyant/opalescent feldspar. Rock is crudely laminated.
7/26/2003	24P-470-475	470.00	475.00	Oxybio dies out, ordinary biotite predominates.
7/26/2003	24P-475-480	475.00	480.00	Oxybio dies out, ordinary biotite predominates.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/26/2003	24P-480-485	480.00	485.00	2 "pies" in the rotary splitter - stop for the day. Note hornblende crystal, approximately 2mm x 4mm
7/27/2003	24P-485-490	485.00	490.00	H2O at 407 ft at 0500 hrs, 7/27/03. Sanidine: chatoyant/opalescent feldspar.
7/27/2003	24P-490-495	490.00	495.00	
7/27/2003	24P-495-500	495.00	500.00	
7/27/2003	24P-500-505	500.00	505.00	Slow ROP, chips ground to 1cm, mostly less. >50% passes 12 mesh sample sieve. Chatoyant/opalescent sanidine.
7/27/2003	24P-505-510	505.00	510.00	Slightly darker in color.
7/27/2003	24P-510-515	510.00	515.00	Oxybio. Hornblende: 2mm x 4mm crystals. Chips to 3cm recovered from reject side show large lithoclasts.
7/27/2003	24P-515-520	515.00	520.00	Chatoyant/opalescent sanidine.
7/27/2003	24P-520-525	520.00	525.00	Oxybio. Note water-clear quartz - probably deposited along [FRACTURE].
7/27/2003	24P-525-530	525.00	530.00	
7/27/2003	24P-530-535	530.00	535.00	
7/27/2003	24P-535-540	535.00	540.00	Large lithoclast, looks like an autolith. Oxybio. Note 2-2mm spherulites.
7/27/2003	24P-540-545	540.00	545.00	
7/27/2003	24P-545-550	545.00	550.00	Note water-clear quartz - probably deposited along [FRACTURE].
7/27/2003	24P-550-555	550.00	555.00	Sample contains about 1% white crystal-rich material - probably lithic fragments.
7/27/2003	24P-555-560	555.00	560.00	Note calcite along [FRACTURE(s)]. The hole makes more water, too. Oxybio. Trace, through-going quartz microveinlets.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/27/2003	24P-560-565	560.00	565.00	Chatoyant/opalescent sanidine. Oxybio. Note water-clear quartz - probably deposited along [FRACTURE]. Splitter set to 5/16 split @ 560 ft (was 6/16 since 420 ft).
7/27/2003	24P-565-570	565.00	570.00	Oxybio.
7/27/2003	24P-570-575	570.00	575.00	Oxybio.
7/27/2003	24P-575-580	575.00	580.00	
7/27/2003	24P-580-585	580.00	585.00	Note calcite along [FRACTURE(s)]. The hole makes more water, too. Sample contains 10% white banded calcite - [FRACTURE].
7/27/2003	24P-585-590	585.00	590.00	Trace, through-going quartz microveinlets. Note calcite along [FRACTURE(s)]. The hole makes more water, too.
7/27/2003	24P-590-595	590.00	595.00	
7/27/2003	24P-595-600	595.00	600.00	Slow ROP, chips ground to 1cm, mostly less. >50% passes 12 mesh sample sieve.
7/27/2003	24P-600-605	600.00	605.00	
7/27/2003	24P-605-610	605.00	610.00	Pure white calcite to 1cm - fills [FRACTURE(s)] - 5% is white calcite.
7/27/2003	24P-610-615	610.00	615.00	Pure white calcite to 1cm - fills [FRACTURE(s)] - 5% is white calcite. Chatoyant/opalescent/irridescent sanidine.
7/27/2003	24P-615-620	615.00	620.00	
7/27/2003	24P-620-625	620.00	625.00	Chalcedonic quartz.
7/27/2003	24P-625-630	625.00	630.00	Oxybio.
7/28/2003	24P-630-635	630.00	635.00	Calcite, along [FRACTURES]. Splitter set to 4/16 split.
7/28/2003	24P-635-640	635.00	640.00	Calcite, along [FRACTURES]. 5% bright white calcite. Oxybio.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/28/2003	24P-640-645	640.00	645.00	Calcite, along [FRACTURES]. 5% bright white calcite. Note increase in dark (N3) lithics - slight reddish (FeOx) overprint. Probably lava flow.
7/28/2003	24P-645-650	645.00	650.00	Trace, white calcite, thin coatings along fractures. Possible decrease in fracture density.
7/28/2003	24P-650-655	650.00	655.00	
7/28/2003	24P-655-660	655.00	660.00	Oxybio. Trace, white calcite, thin coatings along fractures. Possible decrease in fracture density.
7/28/2003	24P-660-665	660.00	665.00	Calcite, along [FRACTURES]. 5% bright white calcite.
7/28/2003	24P-665-670	665.00	670.00	Oxybio.
7/28/2003	24P-670-675	670.00	675.00	Chatoyant/opalescent/irridescent sanidine. Oxybio. Thin zones of dense welding - welding may be increasing.
7/28/2003	24P-675-680	675.00	680.00	Oxybio. Thin zones of dense welding - welding may be increasing.
7/28/2003	24P-680-685	680.00	685.00	Trace, white calcite, thin coatings along fractures. Possible decrease in fracture density. Oxybio.
7/28/2003	24P-685-690	685.00	690.00	Chatoyant/opalescent/irridescent sanidine. Oxybio. Thin zones of dense welding - welding may be increasing.
7/28/2003	24P-690-695	690.00	695.00	Thin zones of dense welding - welding may be increasing.
7/28/2003	24P-695-700	695.00	700.00	
7/28/2003	24P-700-705	700.00	705.00	White calcite, deposited along/in open [FRACTURES]. Oxybio.
7/28/2003	24P-705-710	705.00	710.00	White calcite, deposited along/in open [FRACTURES]. Note craquelure texture developed on some chips - irregular cooling fractures. Narrow (.3mm) microfractures, quartz-filled.
7/28/2003	24P-710-715	710.00	715.00	White calcite, deposited along/in open [FRACTURES]. Drusy quartz along [FRACTURES]. From 710 ft to 820 ft, dense welding has obliterated open porosity and developed crude laminae.
7/28/2003	24P-715-720	715.00	720.00	Drusy quartz along [FRACTURES]. Note craquelure texture developed on some chips - irregular cooling fractures. Narrow (.3mm) microfractures, quartz-filled. Oxybio.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/28/2003	24P-720-725	720.00	725.00	Narrow (.3mm) microfractures, quartz-filled. Chatoyant sanidine. From 710 ft to 820 ft, dense welding has obliterated open porosity and developed crude laminae. Black lithoclast 1cm x 1.5cm…Spitter set to 3/16 split.
7/28/2003	24P-725-730	725.00	730.00	Narrow (.3mm) microfractures, quartz-filled.
7/28/2003	24P-730-735	730.00	735.00	Chatoyant sanidine. Drusy quartz along fractures.
7/28/2003	24P-735-740	735.00	740.00	Drusy quartz along fractures. Narrow (.3mm) microfractures, quartz-filled.
7/29/2003	24P-740-745	740.00	745.00	Narrow (.3mm) microfractures, quartz-filled.
7/29/2003	24P-745-750	745.00	750.00	Drusy quartz along [FRACTURES].
7/29/2003	24P-750-755	750.00	755.00	Chips are fissile, with a flattened aspect.
7/29/2003	24P-755-760	755.00	760.00	Chips display a hackly texture and show crude layering.
7/29/2003	24P-760-765	760.00	765.00	Drusy quartz along fractures. Chips are fissile, with a flattened aspect. Chips display a hackly texture and show crude layering.
7/29/2003	24P-765-770	765.00	770.00	Chips display a hackly texture and show crude layering.
7/29/2003	24P-770-775	770.00	775.00	Pink clay-altered material, <1%.
7/29/2003	24P-775-780	775.00	780.00	Pink clay-altered material, <1%.
7/29/2003	24P-780-785	780.00	785.00	
7/29/2003	24P-785-790	785.00	790.00	Chips display a hackly texture and show crude layering. Note 5mm red (5R 4/6) lithic clast.
7/29/2003	24P-790-795	790.00	795.00	Chips display a hackly texture and show crude layering. Chatoyant sanidine. Drusy quartz along [FRACTURES].
7/29/2003	24P-795-800	795.00	800.00	Chatoyant sanidine. Drusy quartz along [FRACTURES]. Narrow (.3mm) microfractures, quartz-filled. Chips are fissile, with a flattened aspect.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/29/2003	24P-800-805	800.00	805.00	Microveinlets, filled with clear quartz.
7/29/2003	24P-805-810	805.00	810.00	Drusy quartz lining thin open [FRACTURES].
7/29/2003	24P-810-815	810.00	815.00	Drusy quartz lining thin open [FRACTURES].
7/29/2003	24P-815-820	815.00	820.00	Opalescent/chatoyant/irridescent sanidine. Oxybio.
7/29/2003	24P-820-825	820.00	825.00	
7/29/2003	24P-825-830	825.00	830.00	Small sample, ground fine, 80% passes #12 sieve. Brown (5YR 4/4) ash-flow tuff, probably Bullfrog…
7/29/2003	24P-830-835	830.00	835.00	
7/29/2003	24P-835-840	835.00	840.00	
7/29/2003	24P-840-845	840.00	845.00	Opalescent/chatoyant/irridescent sanidine. Drusy quartz lining thin open [FRACTURES]. Splitter set to 4/16 split.
7/29/2003	24P-845-850	845.00	850.00	Opalescent/chatoyant/irridescent sanidine. Drusy quartz lining thin open [FRACTURES].
7/29/2003	24P-850-855	850.00	855.00	Opalescent/chatoyant/irridescent sanidine.
7/29/2003	24P-855-860	855.00	860.00	Sample has a coarsely sucrosic ("sugary") aspect.
7/29/2003	24P-860-865	860.00	865.00	
7/29/2003	24P-865-870	865.00	870.00	Hornblende - 1x3mm.
7/29/2003	24P-870-875	870.00	875.00	
7/29/2003	24P-875-880	875.00	880.00	Red siltstone clast?

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
7/29/2003	24P-880-885	880.00	885.00	Sample has a coarsely sucrosic ("sugary") aspect. MnOx dendrites - "rosettes".
7/29/2003	24P-885-890	885.00	890.00	Sample has a coarsely sucrosic ("sugary") aspect. MnOx dendrites - "rosettes".
7/29/2003	24P-890-895	890.00	895.00	Chips are rounded lithoclasts of diverse rock types - reworked, from 890 to 930 ft. CONTACT, Ash flow tuff with coarse sandstone - probably sharp. Conglomerate unit (890 - 900ft) originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-895-900	895.00	900.00	Chips are rounded lithoclasts of diverse rock types - reworked, from 890 to 930 ft. Conglomerate unit (890 - 900ft) originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-900-905	900.00	905.00	Matrix: "Other" - The sample from 890 to 915 ft has no matrix, is all rounded heterolithoclasts. Chatoyant sanidine, evidently as sandstone component. Coarse conglomeratic sandstone - multilithic, most are well-rounded, 4-5mm in diameter, and there are a few beige (5YR 8/4) soft fragments of relic matrix material. The "lithics" from 900-915 ft range to pebble in size - rock is probably conglomeratic. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-905-910	905.00	910.00	Coarse conglomeratic sandstone - multilithic, most are well-rounded, 4-5mm in diameter and there are a few beige (5YR 8/4) soft fragments of relic matrix material. The "lithics" from 900-915 ft range to pebble in size - rock is probably conglomeratic. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-910-915	910.00	915.00	Weakly cemented volcaniclastic sandstone from 915 to 933 ft. Contact is gradational. The "lithics" from 900-915 ft range to pebble in size - rock is probably conglomeratic. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-915-920	915.00	920.00	Weakly cemented volcaniclastic sandstone from 915 to 933 ft. Contact is gradational. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-920-925	920.00	925.00	Weakly cemented volcaniclastic sandstone from 915 to 933 ft. Contact is gradational. Clay - soft, sticky, 5YR 8/4 - possibly a zeolite (mordenite or erionite). Alteration (argillization and/or zeolitization) has destroyed sample porosity. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-925-930	925.00	930.00	Alteration (argillization and/or zeolitization) has destroyed sample porosity. Conglomerate and sandstone from 900 - 930 ft originally logged as reworked indicating volcaniclastic character.
7/29/2003	24P-930-935	930.00	935.00	Alteration (argillization and/or zeolitization) has destroyed sample porosity.
7/29/2003	24P-935-940	935.00	940.00	
7/29/2003	24P-940-945	940.00	945.00	Hornblende. Splitter set to 5/16 split.
7/29/2003	24P-945-950	945.00	950.00	
7/29/2003	24P-950-955	950.00	955.00	
7/29/2003	24P-955-960	955.00	960.00	

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7/29/2003	24P-960-965	960.00	965.00	Splitter set to 6/16 split.
7/29/2003	24P-965-970	965.00	970.00	Lithics could be uphole contamination - they are rounded - from 890 to 910 ft.
7/29/2003	24P-970-975	970.00	975.00	Splitter set to 7/16 split.
7/29/2003	24P-975-980	975.00	980.00	
7/29/2003	24P-980-985	980.00	985.00	Collecting from both sides (ie., including reject) of sampler. 100% split, 985 to 1005 ft.
7/29/2003	24P-985-990	985.00	990.00	
7/29/2003	24P-990-995	990.00	995.00	990 to 1005 ft - 5mm green (10Y 5/4) clasts which resemble olivine basalt. Larger sample.
7/29/2003	24P-995-1000	995.00	1000.00	
7/29/2003	24P-1000-1005	1000.00	1005.00	Ash flow tuff, sucrosic texture, non-welded, crystal-poor, lithic ~= mafics @ 1-3%, pumice-rich. Unit persists from 933 to 1200 ft. Splitter set to 8/16 split.
7/29/2003	24P-1005-1010	1005.00	1010.00	
7/29/2003	24P-1010-1015	1010.00	1015.00	Fissile - chips have a flattened aspect ratio (like little dinner plates).
7/29/2003	24P-1015-1020	1015.00	1020.00	Pumice fragments are differentially stained orange (FeOx).
7/30/2003	24P-1020-1025	1020.00	1025.00	
7/30/2003	24P-1025-1030	1025.00	1030.00	
7/30/2003	24P-1030-1035	1030.00	1035.00	
7/30/2003	24P-1035-1040	1035.00	1040.00	Reddish (10R 4/6) overprint - possibly due to welding. Hornblende 2mm x 3mm, reflective cleavage.

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7/30/2003	24P-1040-1045	1040.00	1045.00	
7/30/2003	24P-1045-1050	1045.00	1050.00	
7/30/2003	24P-1050-1055	1050.00	1055.00	Pumices are slightly flattened and/or distorted. Reddish (10R 4/6) overprint - possibly due to welding.
7/30/2003	24P-1055-1060	1055.00	1060.00	Siltstone clast. Reddish (10R 4/6) overprint - possibly due to welding.
7/30/2003	24P-1060-1065	1060.00	1065.00	Siltstone clast.
7/30/2003	24P-1065-1070	1065.00	1070.00	
7/30/2003	24P-1070-1075	1070.00	1075.00	
7/30/2003	24P-1075-1080	1075.00	1080.00	Splitter set to 7/16 split.
7/30/2003	24P-1080-1085	1080.00	1085.00	Fissile - chips have a flattened aspect ratio (like little dinner plates).
7/30/2003	24P-1085-1090	1085.00	1090.00	Fissile - chips have a flattened aspect ratio (like little dinner plates). Siltstone clast.
7/30/2003	24P-1090-1095	1090.00	1095.00	
7/30/2003	24P-1095-1100	1095.00	1100.00	Hornblende 2mm x 3mm, reflective cleavage.
7/30/2003	24P-1100-1105	1100.00	1105.00	Light brownish-beige ashflow tuff, non-welded (5YR 5/6). Splitter set to 6/16 split.
7/30/2003	24P-1105-1110	1105.00	1110.00	
7/30/2003	24P-1110-1115	1110.00	1115.00	
7/30/2003	24P-1115-1120	1115.00	1120.00	1mm euhedral biotite in 3mm bleached pumice (?) fragment.

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7/30/2003	24P-1120-1125	1120.00	1125.00	
7/30/2003	24P-1125-1130	1125.00	1130.00	
7/30/2003	24P-1130-1135	1130.00	1135.00	
7/30/2003	24P-1135-1140	1135.00	1140.00	
7/30/2003	24P-1140-1145	1140.00	1145.00	
7/30/2003	24P-1145-1150	1145.00	1150.00	
7/30/2003	24P-1150-1155	1150.00	1155.00	Red siltstone lithoclast, 0.5mm x 1.5mm
7/30/2003	24P-1155-1160	1155.00	1160.00	
7/30/2003	24P-1160-1165	1160.00	1165.00	
7/30/2003	24P-1165-1170	1165.00	1170.00	
7/30/2003	24P-1170-1175	1170.00	1175.00	
7/30/2003	24P-1175-1180	1175.00	1180.00	
7/30/2003	24P-1180-1185	1180.00	1185.00	
7/30/2003	24P-1185-1190	1185.00	1190.00	
7/30/2003	24P-1190-1195	1190.00	1195.00	Thin (through-going?) zones of weak welding (to 2mm thick) or possible silicification. Resembles Prow Pass but fewer crystals and clasts, less pumice, too. Red siltstone lithoclast, 0.5mm x 1.5mm
7/30/2003	24P-1195-1200	1195.00	1200.00	Thin (though-going?) zones of weak welding (to 2mm thick) or possible silicification.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/5/2003	24P-1200-1205	1200.00	1205.00	Fluid injection rate (water) assumed @ 1gpm (1200 - 1860 ft); enough to cool air swivel. 8/5/03 - Trip to new 6-1/4" bit. Encounter fill at 735 ft (!?) - Bridged at 735 to 740 ft, have to clean it out. 780 ft - more fill, clean it out too - driller is not circulating, just knocking it down.
8/5/2003	24P-1205-1210	1205.00	1210.00	
8/5/2003	24P-1210-1215	1210.00	1215.00	Reddish-brown (10R 4/6) siltstone clast.
8/5/2003	24P-1215-1220	1215.00	1220.00	
8/5/2003	24P-1220-1225	1220.00	1225.00	
8/5/2003	24P-1225-1230	1225.00	1230.00	Note pale greenish cast to 30% of the chips - thin, lithified air-fall tuff? Fissile: chips have a flattened aspect ratio, like dinner plates.
8/5/2003	24P-1230-1235	1230.00	1235.00	
8/5/2003	24P-1235-1240	1235.00	1240.00	
8/5/2003	24P-1240-1245	1240.00	1245.00	Splitter set to 7/16 split.
8/5/2003	24P-1245-1250	1245.00	1250.00	
8/5/2003	24P-1250-1255	1250.00	1255.00	
8/5/2003	24P-1255-1260	1255.00	1260.00	Reddish-brown (10R 4/6) siltstone clast.
8/5/2003	24P-1260-1265	1260.00	1265.00	
8/5/2003	24P-1265-1270	1265.00	1270.00	
8/5/2003	24P-1270-1275	1270.00	1275.00	
8/5/2003	24P-1275-1280	1275.00	1280.00	

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/5/2003	24P-1280-1285	1280.00	1285.00	
8/5/2003	24P-1285-1290	1285.00	1290.00	
8/5/2003	24P-1290-1295	1290.00	1295.00	
8/5/2003	24P-1295-1300	1295.00	1300.00	
8/5/2003	24P-1300-1305	1300.00	1305.00	Small sample: >50% passes the #12 wash sieve. Light grey crystalline drusy quartz, filling [FRACTURES]. Lithic volume % decreases to 2%.
8/5/2003	24P-1305-1310	1305.00	1310.00	Small sample: >50% passes the #12 wash sieve. Light grey crystalline drusy quartz, filling [FRACTURES]. Note large (1cm) clast looks like crystal-rich (Topopah?) tuff.
8/5/2003	24P-1310-1315	1310.00	1315.00	The chips (retained on 12-20 mesh) are non-welded crystal-poor creamy (10YR 5/4) tuff, while the sample as a whole contains another 50-60% of rounded sand grains which are multilithic - quartz>feldspar>volcanic rock fragments; therefore, 1300-1340 ft may be a reworked zone.
8/5/2003	24P-1315-1320	1315.00	1320.00	Small sample: >50% passes the #12 wash sieve. Light grey crystalline drusy quartz, filling [FRACTURES].
8/5/2003	24P-1320-1325	1320.00	1325.00	Small sample: >50% passes the #12 wash sieve. Light grey crystalline drusy quartz, filling [FRACTURES].
8/5/2003	24P-1325-1330	1325.00	1330.00	Small sample: >50% passes the #12 wash sieve.
8/5/2003	24P-1330-1335	1330.00	1335.00	Small sample: >50% passes the #12 wash sieve.
8/5/2003	24P-1335-1340	1335.00	1340.00	Small sample: >50% passes the #12 wash sieve.
8/5/2003	24P-1340-1345	1340.00	1345.00	Small sample: >50% passes the #12 wash sieve.
8/5/2003	24P-1345-1350	1345.00	1350.00	
8/5/2003	24P-1350-1355	1350.00	1355.00	Fissile: the chips are thin and flattened, like little poker chips. 1356 to 1366 ft (+/-1 ft) is interbedded red clay and siltstone, thin (<2 ft) sandstone bed at 1359 to 1361 ft.
8/5/2003	24P-1355-1360	1355.00	1360.00	Abundant reddish-grey clay (10R 4/6) is 80% of sample. Remainder is tuff. 1359 ft - contact (?) - Well-sorted heterolithic effervescent sandstone - <5 ft thick. Matrix: "Other" - intense argillization. Light red reactive siltstone.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/5/2003	24P-1360-1365	1360.00	1365.00	1359 ft - Contact (?) - Well-sorted heterolithic effervescent sandstone - <5 ft thick. Light red reactive siltstone. Bimodal green 10Y 5/4 / 10Y 6/2 clay (forms balls to 1cm) and more competent siltstone.
8/5/2003	24P-1365-1370	1365.00	1370.00	Light red reactive siltstone. 1366 to 1400 ft is interbedded green siltstone and sandstone, locally clayey. Euhedral to anhedral biotite in volcaniclastic sandstone 1365 to 1400 ft. 1356 to 1366 ft (+/-1 ft) is interbedded red clay and siltstone, thin (<2 ft) sandstone bed at 1359 to 1361 ft.
8/5/2003	24P-1370-1375	1370.00	1375.00	Anhedral biotites average 1mm. Sediment reacts to 10% HCL.
8/5/2003	24P-1375-1380	1375.00	1380.00	
8/5/2003	24P-1380-1385	1380.00	1385.00	
8/5/2003	24P-1385-1390	1385.00	1390.00	
8/5/2003	24P-1390-1395	1390.00	1395.00	
8/5/2003	24P-1395-1400	1395.00	1400.00	
8/6/2003	24P-1400-1405	1400.00	1405.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Red (10R 4/6) effervescent siltstone clast. Pale green sucrosic reworked tuff. Volcanic lithoclasts and rare reactive siltstone clasts 1400 to 1480 ft. Quartz phenocryst % based on scarce chips of tuff (1400 to 1420 ft).
8/6/2003	24P-1405-1410	1405.00	1410.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite).
8/6/2003	24P-1410-1415	1410.00	1415.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite).
8/6/2003	24P-1415-1420	1415.00	1420.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Pebble-rich - probably a conglomerate. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1420-1425	1420.00	1425.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite).
8/6/2003	24P-1425-1430	1425.00	1430.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite).
8/6/2003	24P-1430-1435	1430.00	1435.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1435-1440	1435.00	1440.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/6/2003	24P-1440-1445	1440.00	1445.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Pebble-rich - probably a conglomerate. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1445-1450	1445.00	1450.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Note pebble of rounded basalt - 0.4mm in diameter and well-rounded. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1450-1455	1450.00	1455.00	
8/6/2003	24P-1455-1460	1455.00	1460.00	Bedded units - 10R 5/4 intercalated with 5GY 7/4 (red/green), both sucrosic - tuff/sandstone. Pebble-rich - probably a conglomerate. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1460-1465	1460.00	1465.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Mafics are present in the matrix and in the sand-sized component. Pebble-rich - probably a conglomerate. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1465-1470	1465.00	1470.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Mafics are present in the matrix and in the sand-sized component. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1470-1475	1470.00	1475.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Mafics are present in the matrix and in the sand-sized component. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1475-1480	1475.00	1480.00	Approximately 50% of sample passes the #12 sample washing sieve - this material looks like sand with subrounded quartz > green-stained (quartz? feldspar?) > mafics (mostly biotite). Mafics are present in the matrix and in the sand-sized component. Contact appears to be gradational from 1475 to 1480ft, probably a basal conglomerate. Sandstone and conglomerate (1415 - 1420ft; 1430 - 1450ft; 1455 - 1480ft) originally logged as reworked indicating volcaniclastic character.
8/6/2003	24P-1480-1485	1480.00	1485.00	
8/6/2003	24P-1485-1490	1485.00	1490.00	
8/6/2003	24P-1490-1495	1490.00	1495.00	
8/6/2003	24P-1495-1500	1495.00	1500.00	1495 - 1500 ft Rock [fractured], H20 increase.
8/6/2003	24P-1500-1505	1500.00	1505.00	Sucrosic ash-flow tuff, crystal-poor (except ubiquitous euhedral biotite), pumiceous, variably lithic.
8/6/2003	24P-1505-1510	1505.00	1510.00	
8/6/2003	24P-1510-1515	1510.00	1515.00	
8/6/2003	24P-1515-1520	1515.00	1520.00	Red (10R 4/6) siltstone clast.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/6/2003	24P-1520-1525	1520.00	1525.00	
8/6/2003	24P-1525-1530	1525.00	1530.00	Trace (1 fragment), silicification (welding?).
8/6/2003	24P-1530-1535	1530.00	1535.00	Red (10R 4/6) siltstone clast.
8/6/2003	24P-1535-1540	1535.00	1540.00	
8/6/2003	24P-1540-1545	1540.00	1545.00	
8/6/2003	24P-1545-1550	1545.00	1550.00	
8/6/2003	24P-1550-1555	1550.00	1555.00	
8/6/2003	24P-1555-1560	1555.00	1560.00	
8/6/2003	24P-1560-1565	1560.00	1565.00	1cm grey (N5) andesite clast. Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.
8/6/2003	24P-1565-1570	1565.00	1570.00	Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.
8/6/2003	24P-1570-1575	1570.00	1575.00	
8/6/2003	24P-1575-1580	1575.00	1580.00	Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.
8/6/2003	24P-1580-1585	1580.00	1585.00	Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.
8/6/2003	24P-1585-1590	1585.00	1590.00	Lava clast - 12mm.
8/6/2003	24P-1590-1595	1590.00	1595.00	Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.
8/6/2003	24P-1595-1600	1595.00	1600.00	Green (5GY 7/4) zeolitized pumice clasts to 6mm x 1mm.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/6/2003	24P-1600-1605	1600.00	1605.00	Crystal poor, lithic-rich pumiceous tuff, non-welded, heterolithic.
8/6/2003	24P-1605-1610	1605.00	1610.00	
8/6/2003	24P-1610-1615	1610.00	1615.00	
8/6/2003	24P-1615-1620	1615.00	1620.00	
8/6/2003	24P-1620-1625	1620.00	1625.00	Red siltstone clast.
8/6/2003	24P-1625-1630	1625.00	1630.00	Red siltstone clast.
8/6/2003	24P-1630-1635	1630.00	1635.00	Trace, grey clay (10YR 4/2).
8/6/2003	24P-1635-1640	1635.00	1640.00	
8/6/2003	24P-1640-1645	1640.00	1645.00	
8/6/2003	24P-1645-1650	1645.00	1650.00	Red siltstone clast.
8/6/2003	24P-1650-1655	1650.00	1655.00	Red siltstone clast.
8/6/2003	24P-1655-1660	1655.00	1660.00	
8/6/2003	24P-1660-1665	1660.00	1665.00	
8/6/2003	24P-1665-1670	1665.00	1670.00	
8/6/2003	24P-1670-1675	1670.00	1675.00	1-2cm balls of grey (10YR 4/2) clay.
8/6/2003	24P-1675-1680	1675.00	1680.00	1-2cm balls of grey (10YR 4/2) clay.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/7/2003	24P-1680-1685	1680.00	1685.00	1-2cm balls of grey (10YR 4/2) clay.
8/7/2003	24P-1685-1690	1685.00	1690.00	
8/7/2003	24P-1690-1695	1690.00	1695.00	1-2cm balls of grey (10YR 4/2) clay.
8/7/2003	24P-1695-1700	1695.00	1700.00	Note weak stratification to tuff (1 clast) - could be MnOx throughput…
8/7/2003	24P-1700-1705	1700.00	1705.00	Red (5YR 4/6) siltstone clasts.
8/7/2003	24P-1705-1710	1705.00	1710.00	
8/7/2003	24P-1710-1715	1710.00	1715.00	
8/7/2003	24P-1715-1720	1715.00	1720.00	
8/7/2003	24P-1720-1725	1720.00	1725.00	Red (5YR 4/6) siltstone clasts. Brown (10YR 5/4) clay (at ~ 1722 ft). Matrix is a pink tuff which breaks down under the bit and passes the #12 wash sieve, leaving brown lithics behind, biasing the washed sample. Log is based on both fractions. Sequence of clay, siltstones and thin sandstone beds, 1722 to 1860 ft TD. Siltstones are variably reactive.
8/7/2003	24P-1725-1730	1725.00	1730.00	Matrix is a pink tuff which breaks down under the bit and passes the #12 wash sieve, leaving brown lithics behind, biasing the washed sample. Log is based on both fractions. Driller says that "…the formation is real clayey." Washing yields 1cm clay balls. Clay from 1722-1733 ft - intense argillization has destroyed matrix and most log parameters.
8/7/2003	24P-1730-1735	1730.00	1735.00	Reactive volcaniclastic sandstone - 50% of chips…
8/7/2003	24P-1735-1740	1735.00	1740.00	Reactive volcaniclastic sandstone - 50% of chips…
8/7/2003	24P-1740-1745	1740.00	1745.00	Very clayey. 1746 ft - Fissile brown (10YR 5/4) effervescent siltstone with few (remnant?) clasts.
8/7/2003	24P-1745-1750	1745.00	1750.00	1746 ft - Fissile brown (10YR 5/4) effervescent siltstone with few (remnant?) clasts. Trace (<1%) banded limestone clasts…
8/7/2003	24P-1750-1755	1750.00	1755.00	1753 ft - Fissile brown siltstone - less reactive (fining downward sequence?). Sample consists of 75% clayballs and 25% red and brown siltstone fragments.
8/7/2003	24P-1755-1760	1755.00	1760.00	Sample consists of 75% clayballs and 25% red and brown siltstone fragments.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/7/2003	24P-1760-1765	1760.00	1765.00	Sample contains siltstone > claystone > sandstone.
8/7/2003	24P-1765-1770	1765.00	1770.00	Sample contains siltstone > claystone > sandstone.
8/7/2003	24P-1770-1775	1770.00	1775.00	
8/7/2003	24P-1775-1780	1775.00	1780.00	Sample consists of clay > siltstone > sandstone.
8/7/2003	24P-1780-1785	1780.00	1785.00	Sample consists of clay > siltstone > sandstone.
8/7/2003	24P-1785-1790	1785.00	1790.00	Sample consists of clay > siltstone > sandstone.
8/7/2003	24P-1790-1795	1790.00	1795.00	Sample consists of clay > siltstone > sandstone.
8/7/2003	24P-1795-1800	1795.00	1800.00	Reddish brown (5YR 3/4) siltstone, little clay, no sandstone.
8/7/2003	24P-1800-1805	1800.00	1805.00	Clay > siltstone. 1 gypsum clast (N9), soft, etc.
8/7/2003	24P-1805-1810	1805.00	1810.00	Clay > siltstone.
8/7/2003	24P-1810-1815	1810.00	1815.00	Clay > siltstone.
8/7/2003	24P-1815-1820	1815.00	1820.00	Clay ~= siltstone. 1 clast of well-sorted .5mm calcite-cemented white bedded sandstone.
8/7/2003	24P-1820-1825	1820.00	1825.00	Siltstone > clay. 3 clasts of red volcanic rock fragments.
8/7/2003	24P-1825-1830	1825.00	1830.00	Sandy.
8/7/2003	24P-1830-1835	1830.00	1835.00	Clay > siltstone. Gooey: clay >> siltstone: single clast of CuOx-stained gypsum (Redbed copper?)
8/7/2003	24P-1835-1840	1835.00	1840.00	Gooey: clay >> siltstone.

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Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
8/7/2003	24P-1840-1845	1840.00	1845.00	Clay ~= siltstone.
8/7/2003	24P-1845-1850	1845.00	1850.00	Siltstone > clay.
8/7/2003	24P-1850-1855	1850.00	1855.00	Gooey: clay >> siltstone.
8/7/2003	24P-1855-1860	1855.00	1860.00	Clay ~= siltstone. TD: 1860 ft TD 1532 hrs, 8/7/03