

FIELD DATA SHEET
LITHOLOGY
LOG

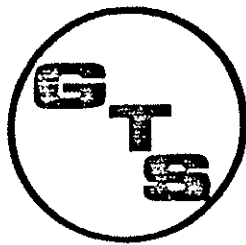
HOLE NO. 11-77-AHS
DATE 3/14/78
PROJECT GEOLOGIST
David Lloyd

HOLE NUMBER Austin Hot Springs

SOURCE MAP 11-77 TD 1484'

REMARKS _____
Permit #22
Hole #8 6/5/75-29

DEPTH		LITHOLOGY
TO	FROM	
3'	GL	Talus: Large, disoriented blocks of columnar basalt in a matrix of very poorly sorted sub-angular lithic gravel and coarse sand. 30% organic, bark, wood chips etc.
8'	3'	Black, organic clay: Greasy feel w/ much rotting vegetable matter.
50'	8'	Basalt: Sparingly porphyritic (plag and pxn. Xtals < .5mm in length and identifiable), medium dark gray in color, and fractured. Fracture surfaces have brownish-red coatings. Some fractures are coated w/ a thin layer of blue-green talc-like substance. Top 10' of this unit is vesicular; the vesicular cavities filled w/ an unidentified blue-green mineral.
60'	50'	Brick-red cinder and ash bed: Substantially weathered to clay sized particles (70% mud). May be a baked soil horizon.
70'	60'	Medium-dark gray mud.



FIELD DATA SHEET LITHOLOGY LOG

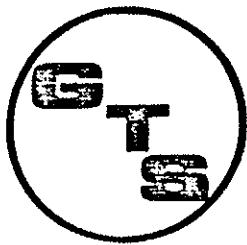
HOLE NO. <u>11-77-AHS</u>
DATE <u>3/14/78</u>
PROJECT GEOLOGIST <u>David Houd</u>

HOLE NUMBER Austin Hot Springs

SOURCE MAP 11-77

REMARKS _____

DEPTH		LITHOLOGY
TO	FROM	
180'	70'	Basaltic Breccia: Dark gray basalt "clasts" in a gray-muddy matrix. "Rock to mud ratio is variable thru-out this section. 30% of the basalt clast population is vesicular, w/ blue-green talc-like mineral both filling the vesicles and also found as crusts on some of the cuttings. This resembles in appearance a basaltic mud-flow breccia
190'	180'	Pyrroxene-basalt porphyry: Dark gray, aphanitic basalt w/ pxn phenocrysts to 2 mm in length.
210'	190'	Basaltic tuff breccia: Medium fine grained (overall texture); medium dark gray. Some indicated than the basaltic breccia (70' to 180') up-section.
(red at 190')	(bake zone at 190')	
230'	210'	Basalt: fractured, dark gray, aphanitic basalt. Fracture surfaces exhibit reddish-brown oxide coatings. Some fracture surfaces are coated w/ an unidentified apple-green colored encrusting mineral.
250'	230'	Basalt Breccia: Dark gray, cinders, micro-vesicular (pinhead sized gas holes) and fine indurated. Pale blue zeolites in vesicles. Thin red "bake-zone" at 230'



FIELD DATA SHEET LITHOLOGY LOG

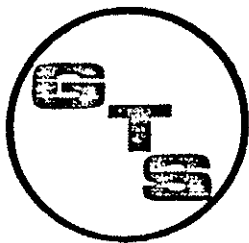
HOLE NO. 11-77-AHS
DATE 3/14/78
PROJECT GEOLOGIST
David Lloyd

HOLE NUMBER Austin Hot Springs

SOURCE MAP 11-77

REMARKS _____

DEPTH		LITHOLOGY
TO	FROM	
280'	250'	Peroxene-basalt porphyry: sparse phenocrysts of pxn. (upto 2mm) in a dark gray, aphanitic groundmass.
290'	280'	Vesicular basalt porphyry: pxn. and clao in a dark-gray aphanitic groundmass. Vesicles filled w/ qtz. and blue-green mineral.
330'	290'	Crustal-lithic tuff: Quartz, hornblende and minor accessories in a cream, fine-grained, greenish blue-green matrix.
390'	330'	Basalt: dark gray, slightly vesicular aphanitic groundmass, w/ phenocrysts of olivine and peroxene. Olivine qtz. in the vesicles. Minor amounts of red cinder 370' → 390'
410'	390'	Altered, gray andesitic rhyolite: K-spar vintiferable. Abundant chlorite and epidote.
460'	410'	Meta-basalt: Dark gray in color. Plag and pxn barely identifiable. Abundant chlorite; calcite vein in fillings; minor epidote.
490'	460'	Basaltic tuff: Altered, greenish-brown, olivine bearing, lithic-crystal tuff.



FIELD DATA SHEET
LITHOLOGY
LOG

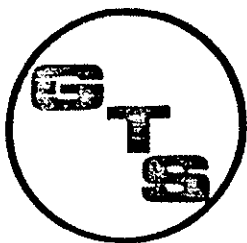
HOLE NO. 11-77-AHS
DATE 3/14/78
PROJECT GEOLOGIST
David Lloyd

HOLE NUMBER Austin Hot Springs
SOURCE MAP 11-77

REMARKS _____

DEPTH		LITHOLOGY
TO	FROM	
550'	490'	Same as above but much finer grained. Matrix (50 → 75%) medium-gray mud
600'	550'	Crystal-lithic tuff: Gray to dark gray in color
660'	600'	Greenish-green crystal lithic tuff
662'	660'	Pinkish-gray lapilli tuff
685'	662'	Meta-basalt: dark greenish-gray, quartz-bearing, aphanitic basalt. Abundant chlorite
705'	685'	Meta-basaltic-crystal lithic tuff. Medium gray in color. Abundant chlorite
880'	705'	Basalt: medium to dark gray; aphanitic
890'	880'	Tuff: light to medium gray, very fine grained, semi-consolidated tuff
910'	890'	Greenish-gray, rhyolitic, crystal-lithic tuff
1160'	910'	Thick section of pyroclastics and agglomerates: andesitic to basaltic in composition (much variation). Purplish-gray in color.
1170'	1160'	Whyr, dark green, massive serpentine. Containing a red-brown mineral with green alteration core

J.G.



FIELD DATA SHEET LITHOLOGY LOG

HOLE NO. <u>11-77-AHS</u>
DATE <u>3/14/78</u>
PROJECT GEOLOGIST <u>David Lloyd</u>

HOLE NUMBER Austin Hot Springs

SOURCE MAP 11-77

REMARKS _____

DEPTH		LITHOLOGY
TO	FROM	
1180'	1170'	Brick red latite tuff: euhedral to anhedral plag phenocrysts (< 1mm). Accessory opaques (< .5mm) Soft, sub-vitreous variscites 1-2mm. Pale yellow amygdaloidal mineral present.
1330'	1180'	Dark gray, fine grain andesite/basalt porphyry: plag lathes 1/2 -> 2mm showing albite twinning on has altered xtals. Plag zoned, altering to green mineral away from center (epidote?). Equant gray-white K-spar. (1200' -> 1330': no opaques, plag to 3mm) (1270' -> 1300': milky-white calcite frac. fillings)
1360'	1330'	Brick-red andesite porphyry: 50% of rock is aphanitic red granular, with light green, subhedral to euhedral (.5 -> 1mm) plag (some compositional zoning)
1380'	1360'	Light gray andesitic-basalt porphyry: plag comp perhaps more sodic since xtals not elongate on C-axis.
1390'	1380'	Brick-red andesite porphyry: as above
1400'	1390'	Gray andesitic tuff
1420'	1400'	Brick red, rhyolitic lappilli tuff:

