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TEC-19

H_2O, 1981 AMax Geothermal Geochemical Forms. Mine Evaluation Report Forms & Analytical Work Forms Colorado, Oregon, Nevada, Utah and Washington

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. X W14164 Date Mar 11, 1981 Time 1620

Name: Moyna well Location: Co. Esm. State NV

NW 1/4 Sec. 16 T 15 R: 36E ; _____ Km/mi. ___ of _____

Lat.: _____ Long.: _____ Sampler: _____

Elevation: 4750 Quad. Rhyolite Ridge

Sample Type: Spring (p), (well) (p), creek, river, soil, salt, sinter, travertine, gas, rock, snow.

Description:

Water Temp. °C 42 Discharge: _____ gpm/Lpm

Ground Temp. °C _____ Well Data: Depth _____

Air Temp. _____ Bore _____

Odor None Pump Type _____

Fluid Color Colorless Level of water in bore _____

Fluid Taste None Type of piping _____

Bubbling _____ Artesian Head _____

Boiling _____ Rock Data:

Vegetation _____ Type (surface) _____

Fluid issues from _____ Color _____

_____ Grain size _____

_____ Megascopic Minerals _____

Salt: Type _____ _____

Quantity _____ _____

Color _____ Alteration: _____

Form _____ Rx Type (at depth) Tuff

Sinter: Type None Water used for _____

Quantity _____ Immediate area used for: _____

Color _____ _____

Form _____ Quality of sample: (Exc.), Good, Poor

Probable cause of manifestation _____

Property owned by _____

Previous and/or Current Leases _____

_____

Comments: _____

SKETCHES

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. X W14165 Date Mar 11, 1977 Time 1500

Name: _____ Location: Co. Esmeralda State NV

NW¼ Sec. 20 T 15 R: 36E ; _____ Km/mi. ____ of _____

Lat.: _____ Long.: _____ Sampler: Pilkington

Elevation: 47 Quad. Davis Mt.

Sample Type: (Spring (p)), well (p), creek, river, soil, salt, sinter, travertine, gas, rock, snow.

Description:

Water Temp. °C 21 Discharge: _____ gpm/Lpm

Ground Temp. °C _____ Well Data: Depth _____

Air Temp. 15 Bore _____

Odor _____ Pump Type _____

Fluid Color None Level of water in bore _____

Fluid Taste _____ Type of piping _____

Bubbling yes Artesian Head _____

Boiling _____ Rock Data:

Vegetation _____ Type (surface) Soil

Fluid issues from Soil Color _____

_____ Grain size _____

_____ Megascopic Minerals _____

Salt: Type _____ _____

Quantity _____ _____

Color _____ Alteration: NA

Form _____ Rx Type (at depth) Tuff

Sinter: Type None Water used for _____

Quantity _____ Immediate area used for: grazing

Color _____ _____

Form _____ Quality of sample: (Exc.), Good, Poor

Probable cause of manifestation _____

Property owned by _____

Previous and/or Current Leases _____

_____

Comments: _____ SKETCHES

_____

_____

_____

_____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14271 Date 12-19-81 Time 1600

Name UNNAMED SPRING Location: Co. ESMERALDA State NV

Sec. NW-NW 23 Twp. 1 S R. 38 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5990 Quad. SILVER PEAK

Sampler DEYMONAZ

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11 DISCHARGE 2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR VERY MILD H_2S BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE NONE STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION — ARTESIAN HEAD _____

FLUID ISSUES FROM RUSTED OUT 2" IRON PIPE ~75' FROM SPRING

ROCK DATA:

TYPE (SURFACE) LATITE XL TUFF

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) LIMESTONE

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR RANGELAND

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14272 Date 12-21-81 Time _____

Name UNNAMED WATER WELL Location: Co. ESMERALDA State NV

Sec. NW-NE 34 Twp. 1N R. 38 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4982 Quad. Silver Peak

Sampler DEYMONAZ

Sample Type: Spring (with pipe), (well (with pipe)) creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C _____ DISCHARGE 5 (gpm) Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR NONE wild H_2S BORE 6"

FLUID COLOR CLEAR PUMP TYPE WINDMILL

FLUID TASTE NONE STATIC HEAD —

BUBBLING — SCALING —

BOILING — TYPE OF PIPING IRON

VEGETATION — ARTESIAN HEAD _____

FLUID ISSUES FROM 2" STEEL PIPE 30 ROCK DATA:

FEET FROM WELLHEAD TYPE (SURFACE) Qal

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) Qal

TYPE _____ WATER USED FOR _____

IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14273 Date 1-7-82 Time 1500

Name Minnesota Sp. Location: Co. Esmeralda State Nv

Sec. SE-SE 16 Twp. 15 R. 38 E ; 12 km (mi) South OF Blair Inc.

Lat. _____ Long. _____ Elevation 6080 Quad. Rhyolite Ridge

Sampler DEYMONAZ

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11 DISCHARGE 3 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE None STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION — ARTESIAN HEAD _____

FLUID ISSUES FROM 2" galvanized steel pipe ~50' From 20' deep adit where water collects

ROCK DATA:

TYPE (SURFACE) Dolomite

COLOR med gray

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE NaCl (?)

QUANTITY V. Minor

COLOR White

FORM Amor.

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Siltstone, dolomite.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle Grazing

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Range Front Flt.

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14274 Date 1-9-82 Time 0900

Name Fumeral Well. Location: Co. Esmer. State Nv

Sec. NW-NE-15 Twp. 25 R. 39 E ; 1.2 km/(mi) N. OF Silver Pk

Lat. _____ Long. _____ Elevation 4270 Quad. Silver Pk

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 79 °C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR Slightly oily

FLUID COLOR V. lt brown

FLUID TASTE Very salty

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ~~ISSUES~~ Collected FROM Rusty 6" steel casing. H2O at ~ 25', downhole sampler used to collect sample

DISCHARGE — gpm/Lpm

WELL DATA:

DEPTH 75 feet

BORE 6"

PUMP TYPE None

STATIC HEAD 15'

SCALING —

TYPE OF PIPING iron

ARTESIAN HEAD —

ROCK DATA:

TYPE (SURFACE) Qal &. Travertine & calcareous sinter

COLOR white – lt brown

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) Paleo siltstone, dolomites.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Not used

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION N-S range Front Flt.

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14991 Date ~~Mar~~ 3-14-81 Time 1230

Name Hole-in-the Wall #2 Location: Co. Churchill State Nv.

Sec. SE-NE 2 Twp. 23N R. 39E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4400 Quad. Shoshone Meadows

Sampler JED

Sample Type: Spring (with pipe), (well (with pipe)) creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 20.5°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR ——— None

FLUID COLOR Clear

FLUID TASTE v. slight NaCl

BUBBLING No

BOILING No

VEGETATION Sage & cheet grass

FLUID ISSUES FROM 2" galvanized steel pipe 5 feet From well head

DISCHARGE 3 (gpm) Lpm

WELL DATA:

DEPTH ?

BORE 6"

PUMP TYPE gas

STATIC HEAD ?

SCALING ———

TYPE OF PIPING Steel

ARTESIAN HEAD No

ROCK DATA:

TYPE (SURFACE) LATITE TUFFS

COLOR REDDISH

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) TUFFACEOUS SEDS & WELDED TUFFS

WATER USED FOR IMMEDIATE AREA STOCK

USED FOR RANGELAND

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14992 Date 3-28-81 Time 1500

Name McCoy ~~Mine~~ Warm Well Location: Co. Churchill State NV,

Sec. _____ Twp. _____ R. _____ ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4940 Quad. Gilbert Ck. S.W.

Sampler Deymonaz — Avery

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 42.5

GROUND TEMP. °C —

AIR TEMP. —

ODOR _____

FLUID COLOR Clear

FLUID TASTE Metallic

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM 2" steel pipe 20' from well head

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 25 (gpm)/Lpm

WELL DATA:

DEPTH ~200'

BORE 5"

PUMP TYPE sub. elect

STATIC HEAD ~180'

SCALING No

TYPE OF PIPING galvanized steel

ARTESIAN HEAD No

ROCK DATA:

TYPE (SURFACE) Triassic L.S.

COLOR Dk gray

GRAIN SIZE _____

MEGASCOPIC MINERALS Calcite, Hg_2S

ALTERATION _____

RX TYPE (AT DEPTH) Triassic l.s.

WATER USED FOR IMMEDIATE AREA USED FOR Stock Mining - rangeland

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION cavernous aquifer in l.s.

PROPERTY OWNED BY U.S.A.

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14993 Date 3-29-81 Time 1200

Name EDWARDS CREEK WW Location: Co. Churchill State NV

Sec. NW-NW 3 Twp. 21 N R. 39 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. Edwards Ck Vly

Sampler J.D. /MA.

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14.5

GROUND TEMP. °C —

AIR TEMP. —

ODOR None

FLUID COLOR Clear

FLUID TASTE None

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM 2" pipe 30' from Windmill

DISCHARGE 5.0 (gpm)/Lpm

WELL DATA:

DEPTH ?

BORE 6"

PUMP TYPE Windmill

STATIC HEAD ?

SCALING —

TYPE OF PIPING 6" steel pipe

ARTESIAN HEAD No

ROCK DATA:

TYPE (SURFACE) Qal

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

SALT:

TYPE —

QUANTITY —

COLOR —

FORM —

SINTER:

TYPE —

QUANTITY —

COLOR —

FORM —

ALTERATION _____

RX TYPE (AT DEPTH) Intermediate Volcanics

WATER USED FOR IMMEDIATE AREA Stock

USED FOR Rangeland

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Drilled into gravel aquifer

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14994 Date 3-29-81 Time 1100

Name Water Well Location: Co. Ch State NV.

Sec. 2 Twp. 21N R. 39E ; 1 km (mi) SW OF HORSESHOE WELL

Lat. _____ Long. _____ Elevation 5240 Quad. Edwards Ck Vly

Sampler JED - MA

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15.5

GROUND TEMP. °C —

AIR TEMP. —

ODOR None

FLUID COLOR Clear

FLUID TASTE —

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM short hose near pump

SALT:

TYPE —

QUANTITY —

COLOR —

FORM —

SINTER:

TYPE —

QUANTITY —

COLOR —

FORM —

DISCHARGE 5 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE 6"

PUMP TYPE sub. elect

STATIC HEAD _____

SCALING —

TYPE OF PIPING galvanized iron

ARTESIAN HEAD — No

ROCK DATA:

TYPE (SURFACE) Qal

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION —

RX TYPE (AT DEPTH) Intermediate volcanics

WATER USED FOR IMMEDIATE AREA Domestic

USED FOR Rangeland/Farming

QUALITY OF SAMPLE (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer in vly gravels

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14995 Date 04/14/81 Time 1200

Name Well 25-9 : PROJECT 864 (McCOY) Location: Co. CHURCHILL State NV

Sec. EE center 9 Twp. 22N R. 40E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5775' Quad. GILBERT CK. SW

Sampler M. AVERY

Sample Type: Spring (with pipe), (well) (drilling in Progress with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 44.44

GROUND TEMP. °C _____

AIR TEMP. (10°C)

ODOR none

FLUID COLOR silty. unclear (silty)

FLUID TASTE none

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ISSUES FROM splitter hose from 6 1/2 inch hole being blown w/ air from compressor.

DISCHARGE 25.0 (gpm)/Lpm

WELL DATA:

DEPTH 1640 T.D. → 2000

BORE 6 1/2"

PUMP TYPE _____

STATIC HEAD ≅1500

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Rc

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS chert; qtzite; silt.st, soapstone : iron staining calc silicate mineral

ALTERATION yes! metamorphic minerals

RX TYPE (AT DEPTH) Rc - altered

WATER USED FOR IMMEDIATE AREA _____

USED FOR _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION G.W. AT 1640' DEPTH

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES AMAX McCOY - 864

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14996 Date 04/15/81 Time 1600

Name WELL 25-9 (PROSECT: 864) Location: Co. CHURCHILL State NV.

Sec. 9 Twp. 22N R. 40E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5775 Quad. Gilbert Ck. SW.

Sampler M. AVERY

Sample Type: Spring (with pipe), (well) (drilling in progress) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 47.78

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR none

FLUID COLOR ~~rose~~ muddy

FLUID TASTE great! just muddy.

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ISSUES FROM 6¼" drill hole via splitter hose + splitter - depth is 1840'

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 25-30 (gpm)/Lpm

WELL DATA:

DEPTH 1840' (T.D.: 2,000' drillhole)

BORE 6¼"

PUMP TYPE _____

STATIC HEAD ≈ 1400'

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) TC

COLOR green - gray - red

GRAIN SIZE _____

MEGASCOPIC MINERALS chert (silica). conglomerate { quartzite (silica).

ALTERATION iron staining

RX TYPE (AT DEPTH) TC

WATER USED FOR IMMEDIATE AREA _____

USED FOR _____

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES 864

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14997 Date 04/16/81 Time 1100

Name 25-9 DRILLHOLE-WELL: PROS. 864 Location: Co. CHURCHILL State NV.

Sec. 9 Twp. 22N R. 40E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5775 Quad. GILBERT CK. SW

Sampler M. AVERY SAMPLE ALLOWED TO SIT 6 HRS BY DRILLER (NIGHT CREW)

Sample Type: Spring (with pipe), (Well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 54.44 (?) DISCHARGE 30 (gpm) Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 10° C DEPTH 2000' (T.D.)

ODOR NONE BORE 6 1/4"

FLUID COLOR MUDDY PUMP TYPE _____

FLUID TASTE — STATIC HEAD ≅ 1400' ?

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION _____ ARTESIAN HEAD _____

FLUID ISSUES FROM SPLITTER HOSE FROM 6 1/4" bore hole at 2000' (T.D.) ROCK DATA:

TYPE (SURFACE) RC

COLOR green-gray-red

SALT: GRAIN SIZE silica

MEGASCOPIC MINERALS some iron

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION ?

SINTER: RX TYPE (AT DEPTH) RC

TYPE _____ WATER USED FOR _____

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION G.W.

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES 864

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14998 Date 05/10/81 Time 1430

Name GEOTHERMAL WELL 864-38-9 Location: Co. CHURCHILL State NEVADA

Sec. _____ Twp. _____ R. _____; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 34.44 DISCHARGE 25 gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH 550'

ODOR slight H_2S BORE 8 5/8"

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE slt. metallic, sulfur taste. STATIC HEAD _____

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION sparse (scrub brush) ARTESIAN HEAD _____

FLUID ISSUES FROM splitter hose 20' ROCK DATA:

from well-head. TYPE (SURFACE) silicified conglomerate

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) silicified congl., quartzite

TYPE _____ WATER USED FOR _____

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES MCCOY - 864 (AMAX)

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14999 Date 05/12/81 Time 0903

Name GEOTHERMAL WELL 864: 38-9 Location: Co. CHURCHILL State NV.

Sec. _____ Twp. _____ R. _____; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °F - 116° 46.66 DISCHARGE 100-125 gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH 1200'

ODOR slt. sulfur BORE 8 5/8"

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE yech! STATIC HEAD 450' approx.

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION sparse scrub brush ARTESIAN HEAD _____

FLUID ISSUES FROM rotary table connection ROCK DATA:

w/ splitter hose. TYPE (SURFACE) silici

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) chert (green) [Pph]

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES AMAX (MCCOY - 864)

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15000 Date 05/13/81 Time 0913

Name 864: 38-9 (GEOTHERMAL WELL) Location: Co. CHURCHILL State NV

Sec. _____ Twp. _____ R. _____ ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler MARK AVERY

Sample Type: Spring (with pipe), (well) (drilling in progress) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C ~~116°F~~ 46.7

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR H_2S (v. slight)

FLUID COLOR none (clear)

FLUID TASTE poor

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ISSUES FROM _____

DISCHARGE 100-150 gpm/Lpm

WELL DATA:

DEPTH 1300'

BORE 8 5/8"

PUMP TYPE _____

STATIC HEAD about 450'

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) RC (congl.)

COLOR green-red-gray

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) chert (ppt)

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer

PROPERTY OWNED BY AMAX

PREVIOUS AND/OR CURRENT LEASES AMAX - 864

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15502 Date 7/5/81 Time —

Name Bully Creek Well #54 Location: Co. Mal. State OR

Sec. 25 (112) Twp. 17S R. 42E ; _____ km/mi _____ OF _____

Lat. 44°04' 08" Long. 117°30'54" Elevation 3300' Quad. Brogan 15'

Sampler David Gragg

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C ~ 30°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR none

FLUID COLOR clear

FLUID TASTE ?

BUBBLING no

BOILING no

VEGETATION no

FLUID ISSUES FROM gradient well

DISCHARGE n.a. (pumped) gpm/Lpm

WELL DATA:

DEPTH 930'

BORE 6"

PUMP TYPE blown

STATIC HEAD ?

SCALING no

TYPE OF PIPING steel

ARTESIAN HEAD ?

ROCK DATA:

TYPE (SURFACE) Chalk Butte

COLOR white

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION ?

RX TYPE (AT DEPTH) vitrophyre

SALT:

TYPE _____

QUANTITY ND

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM ND

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION groundwater recharge

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES AMAX

#3

Pic #2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14275 Date 6-9-82 Time 1500

Name Unnamed Spg Location: Co. ESM State NV

Sec. NE-SE 9 Twp. 1N R. 39E ; 2.5 km/(mi) NW OF Weepah

Lat. _____ Long. _____ Elevation 5558 Quad. Silver Pk

Sampler DEYMONAZ

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6

GROUND TEMP. °C —

AIR TEMP. —

ODOR None

FLUID COLOR Clear

FLUID TASTE None

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM 1" steel pipe buried under pile of rk

DISCHARGE 1 (gpm)/lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Granite

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) Granite

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA _____

USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14287 Date 12-13-81 Time 1000

Name Unnamed Well Location: Co. Esmeralda State Nv

Sec. NE-SE 12 Twp. 1N R. 38 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4780 Quad. Silver Pk.

Sampler Deymonaz

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12° DISCHARGE 5 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH ?

ODOR — BORE 8"

FLUID COLOR Slightly murky PUMP TYPE Gas see-saw

FLUID TASTE — STATIC HEAD —

BUBBLING — SCALING —

BOILING — TYPE OF PIPING Iron

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM Steel pipe 20' From well head

ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Qal or tuffaceous seds.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Stock Rangeland

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY Dyer Ranch controls well.

PREVIOUS AND/OR CURRENT LEASES _____

Reported to have high Arsenic

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14288 Date 12-9-81 Time 1130

Name Blair Junction Well Location: Co. Esmeralda State Nv

Sec. NW-NE 20 Twp. 2 N R. 38 E; _____ km/mi X OF _____

Lat. _____ Long. _____ Elevation _____ Quad. Blair Jct.

Sampler Deymonaz X At Silver Peak Turnoff & Hwy 95

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 19°C

GROUND TEMP. °C —

AIR TEMP. —

ODOR None

FLUID COLOR Clear

FLUID TASTE —

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM 2" Rubber hose ~ 25' From wellhead

SALT:

TYPE —

QUANTITY —

COLOR —

FORM —

SINTER:

TYPE —

QUANTITY —

COLOR —

FORM —

DISCHARGE 200 (gpm)/Lpm

WELL DATA:

DEPTH ~160'

BORE 8"

PUMP TYPE Submersable Elec.

STATIC HEAD —

SCALING —

TYPE OF PIPING Iron

ARTESIAN HEAD No

ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) Qal

WATER USED FOR (RS)

IMMEDIATE AREA USED FOR Rangeland

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY ~~Mat~~ Elton Parsons

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14289 Date 5/10/81 Time _____

Name 1030-39 Location: Co. Elko State Nv.

Sec. SW-SW 26 Twp. 39N R. 59E ; 1 km (mi) N-NE OF Twin Buttes

Lat. _____ Long. _____ Elevation 5500 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 27.5 DISCHARGE 200 (gpm)/lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 410'

ODOR V. Mild H_2S BORE 7"

FLUID COLOR Clear PUMP TYPE —

FLUID TASTE Slightly salty & metallic STATIC HEAD Artesian ~ 30 psi at surface.

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION — ARTESIAN HEAD Yes

FLUID ISSUES FROM 6" picture nipple on well head. Air drilled & ~~Reboved~~ flowed 16 hrs before collection ROCK DATA:

TYPE (SURFACE) Tuffaceous seds/& gravels.

COLOR _____

SALT:

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) Black siltstones

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR Rangeland

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Drilled thru cap rock into Flt zone.

PROPERTY OWNED BY ~~BLM~~ USA

PREVIOUS AND/OR CURRENT LEASES AMAX

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14290 Date 5/10/81 Time _____

Name 1030-39 Location: Co. Elko State Nv

Sec. SW-SW 26 Twp. 39N R. 59 E ; 1 km (mi) N-NE OF Twin Buttes

Lat. _____ Long. _____ Elevation 5500 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 27.5 DISCHARGE 200 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 410

ODOR V. Mild H_2S BORE 7"

FLUID COLOR Clear PUMP TYPE —

FLUID TASTE Slightly salty & metallic STATIC HEAD Artesian ~ 30 psi at surface.

BUBBLING — SCALING —

BOILING — TYPE OF PIPING —

VEGETATION — ARTESIAN HEAD Yes

FLUID ISSUES FROM Drill stem with bottom at 300' partially blocking Flow up hole.

ROCK DATA:

TYPE (SURFACE) Tuffaceous seds & siltstone gravels

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Black siltstone

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Rangeland

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Drilled thru cap rock (clay) into flt zone.

PROPERTY OWNED BY USA

PREVIOUS AND/OR CURRENT LEASES AMAX

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14291 Date 5/26/81 Time _____

Name AT Hole 1030-39 Location: Co. Elko State Nv

Sec. SW-SW 26 Twp. 39N R. 59E; 1 km/(mi) N-NE OF Twin Buttes

Lat. _____ Long. _____ Elevation 5500' Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 31 DISCHARGE 350 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 560

ODOR V. Mild H_2S BORE 7"

FLUID COLOR Clear PUMP TYPE —

FLUID TASTE Slightly salty & metallic STATIC HEAD Artesian

BUBBLING — SCALING —

BOILING — TYPE OF PIPING —

VEGETATION — ARTESIAN HEAD ~ 30-40 psi at surface

FLUID ISSUES FROM 6" picture nipple at well head - ROCK DATA: Tuffaceous seds and

TYPE (SURFACE) siltstone gravels

COLOR —

SALT: GRAIN SIZE —

MEGASCOPIC MINERALS —

TYPE —

QUANTITY —

COLOR —

FORM — ALTERATION —

SINTER: RX TYPE (AT DEPTH) Black hd. siltstone

TYPE — WATER USED FOR IMMEDIATE AREA —

QUANTITY — USED FOR —

COLOR —

FORM — QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Fractures at 270-300 and 560' below capping clay interval.

PROPERTY OWNED BY USA

PREVIOUS AND/OR CURRENT LEASES AMAX

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14292 Date 5/26/81 Time 1100

Name UNNAMED WINDMILL Location: Co. Elko State NV

Sec. NW-NW 19 Twp. 38N R. 60E ; 3½ km/(mi) SE OF Twin Buttes

Lat. _____ Long. _____ Elevation 5456 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17.5 DISCHARGE 1-2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH ?

ODOR None BORE 6"

FLUID COLOR milky PUMP TYPE windmill

FLUID TASTE slightly salty (NaCl) STATIC HEAD —

BUBBLING — SCALING —

BOILING — TYPE OF PIPING galvanized steel

VEGETATION — ARTESIAN HEAD —

FLUID ISSUES FROM 2" pipe 20' From windmill ROCK DATA:

TYPE (SURFACE) Tuffaceous seds.

COLOR lt gray

SALT: GRAIN SIZE

TYPE MEGASCOPIC MINERALS

QUANTITY

COLOR

FORM ALTERATION

SINTER: RX TYPE (AT DEPTH) Tuffaceous seds altered to Tacky blue gray clay.

TYPE WATER USED FOR stock

QUANTITY IMMEDIATE AREA USED FOR Grazing

COLOR

FORM QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Well drilled into small gravel beds in clays.

PROPERTY OWNED BY USA

PREVIOUS AND/OR CURRENT LEASES AMAX

#4
Pic #-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14293 Date 6/5/81 Time 1930

Name West Side Well Location: Co. Elko State Nv

Sec. SW SE 29 Twp. 38N R. 60E ; 1 km/(mi) East OF Sprattling Well

Lat. _____ Long. _____ Elevation 5410 Quad. Tabor Flats

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9 DISCHARGE 10 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 30

ODOR None BORE 6"

FLUID COLOR Clear PUMP TYPE Sub. electric

FLUID TASTE Slight NaCl STATIC HEAD ~20'

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING black iron

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM pipe at well head. Water enters casing in slots below 20' from gravels. ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Qal

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Not used / Rangeland

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Shallow water in gravels in river v/y

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#1
Photo #16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14294 Date 6/5/81 Time 1230

Name Gopher Ck Well Location: Co. Elko State Nv

Sec. NW SW 28 Twp. 38N R. 59E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5570 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 19 DISCHARGE 4 (gpm) Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR ~~None~~ V. slight H_2S BORE 10"

FLUID COLOR Clear PUMP TYPE Jensen (gas)

FLUID TASTE None STATIC HEAD ~~0~~

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING Black iron

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM 2" rusty steel pipe 5' From well head ROCK DATA:

TYPE (SURFACE) Tuffaceous Sods

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR Stock

QUANTITY _____ IMMEDIATE AREA USED FOR Rangeland

COLOR _____

FORM _____ QUALITY OF SAMPLE (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#2
Pic #17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14295 Date 6/5/81 Time 1330

Name Marble Well Location: Co. Elko State Nv

Sec. SE SE 5 Twp. 37N R. 59E; 2 km (mi) NE OF Sagebrush Well

Lat. _____ Long. _____ Elevation 5647 Quad. Deeth

Sampler Deymonaz

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 21 DISCHARGE 15 (gpm) Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR ~~Aroma~~ V. slight H_2S BORE 8"

FLUID COLOR ~~Clear~~ Slightly milky PUMP TYPE Jensen (gas)

FLUID TASTE None STATIC HEAD ?

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING Black iron

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM 2" pipe (rusty) 30' from well head

ROCK DATA:

TYPE (SURFACE) Tuffaceous sed

COLOR _____

SALT:

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Tuffaceous sed

TYPE _____

WATER USED FOR Stock

IMMEDIATE AREA USED FOR Rangeland

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#3
Pic # 18
Unable to get acidified sample before pump quit.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14296 Date 6/5/81 Time 1430

Name Sagebrush well Location: Co. Elko State Nv

Sec. SE-NE 18 Twp. 37N R. 59E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5619 Quad. Deeth

Sampler _____

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 18° DISCHARGE 8 (gpm)/lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH ?

ODOR None BORE 8"

FLUID COLOR Clear PUMP TYPE Jensen (gas)

FLUID TASTE None STATIC HEAD —

BUBBLING — SCALING —

BOILING — TYPE OF PIPING black iron

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM 2" rusty iron pipe 20' from well head

ROCK DATA:

TYPE (SURFACE) Tuffaceous sed

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Tuffaceous sed

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14297 Date 12-14-81 Time 1730

Name AT Hole 56-29 Location: Co. Esmeralda State Nv

Sec. NW-SE 29 Twp. 1N R. 38½E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5030 Quad. Silver Pk

Sampler DEYMONAZ

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 80 DISCHARGE 60 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 665-775 (Blowing From 775)

ODOR H_2S Mold BORE 6⅛

FLUID COLOR (Slightly) Murky PUMP TYPE Air Lift

FLUID TASTE NaCl STATIC HEAD ~500'

BUBBLING — SCALING —

BOILING — TYPE OF PIPING —

VEGETATION — ARTESIAN HEAD —

FLUID ISSUES FROM well head ROCK DATA:

TYPE (SURFACE) Tuffaceous Sedr

COLOR —

SALT: GRAIN SIZE —

TYPE — MEGASCOPIC MINERALS —

QUANTITY —

COLOR —

FORM — ALTERATION —

SINTER: RX TYPE (AT DEPTH) Paleozoic siltstones (Cambrian)

TYPE — WATER USED FOR IMMEDIATE AREA USED FOR Rangeland

QUANTITY —

COLOR —

FORM — QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Water encountered from 640-785'

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. W-14298 Sample No. _____ Date 12-14-81 Time 1730

Name AT Hole 56-29 Location: Co. Esmeralda State Nv

Sec. NW-SE 29 Twp. 1N R. 38½E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5030 Quad. Silver Pk

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 80 DISCHARGE 60 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH 785

ODOR Mild H_2S BORE 6⅛"

FLUID COLOR Murky PUMP TYPE Air lift

FLUID TASTE NaCl STATIC HEAD ~500'

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION — ARTESIAN HEAD _____

FLUID ISSUES FROM Wellhead ROCK DATA:

TYPE (SURFACE) Tuffaceous seds

COLOR _____

SALT: GRAIN SIZE _____

TYPE — MEGASCOPIC MINERALS _____

QUANTITY —

COLOR —

FORM — ALTERATION _____

SINTER: RX TYPE (AT DEPTH) Cambrian siltstone.

TYPE — WATER USED FOR IMMEDIATE AREA USED FOR Range land.

QUANTITY —

COLOR —

FORM — QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Water encountered from 640-785'

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. HS 5a Sample No. W14315 Date 7/6/81 Time 1230

Name Hot Sulphur Springs Location: Co. Elko State NV

Sec. NESE 5 Twp. 41 N R. 52E ; km/mi OF

Lat. Long. Elevation Quad. Tuscarora

Sampler D P. Kington

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 94

GROUND TEMP. °C

AIR TEMP.

ODOR Some H_2S

FLUID COLOR None

FLUID TASTE None

BUBBLING Yes

BOILING Yes

VEGETATION None

FLUID ISSUES FROM al

SALT:

TYPE

QUANTITY

COLOR

FORM

SINTER:

TYPE

QUANTITY

COLOR

FORM

DISCHARGE 1 gpm/~~Lpm~~

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE)

COLOR

GRAIN SIZE

MEGASCOPIC MINERALS

ALTERATION

RX TYPE (AT DEPTH)

WATER USED FOR IMMEDIATE AREA

USED FOR

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION

PROPERTY OWNED BY

PREVIOUS AND/OR CURRENT LEASES

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. HS 8a Sample No. W 14316 Date 3/6/81 Time 1330

Name Hot Sulphur Spgs Location: Co. Elko State NV

Sec. SW NE 8 Twp. 41N R. 52E ; km/mi OF

Lat. Long. Elevation Quad. Tuscarora

Sampler D Pilkington

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 89 DISCHARGE 3 gpm gpm/Lpm

GROUND TEMP. °C WELL DATA:

AIR TEMP. DEPTH

ODOR BORE

FLUID COLOR PUMP TYPE

FLUID TASTE STATIC HEAD

BUBBLING yes SCALING

BOILING TYPE OF PIPING

VEGETATION ARTESIAN HEAD

FLUID ISSUES FROM a/ ROCK DATA:

TYPE (SURFACE)

COLOR

SALT: GRAIN SIZE

TYPE MEGASCOPIC MINERALS

QUANTITY

COLOR

FORM ALTERATION

SINTER: RX TYPE (AT DEPTH)

TYPE WATER USED FOR IMMEDIATE AREA

QUANTITY USED FOR

COLOR

FORM QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION

PROPERTY OWNED BY

PREVIOUS AND/OR CURRENT LEASES

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14317 Date 3/6/81 Time 1630

Name _____ Location: Co. Elko State NV

Sec. NESW 6 Twp. 40N R. 53E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 6000' Quad. Tuscarora

Sampler D Pilkington

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15° DISCHARGE 1000 gpm/~~Lpm~~

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION Water cress ARTESIAN HEAD _____

FLUID ISSUES FROM Ls ROCK DATA:

TYPE (SURFACE) Paleozoic Ls

COLOR dark gray

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) _____

TYPE Travertine several WATER USED FOR IMMEDIATE AREA irrigation

QUANTITY bank across stream USED FOR grazing

COLOR white

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY J. M. Wright

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14361 Date 6/3/81 Time 1000

Name Pole Ck Location: Co. Elko State Nv

Sec. NW 8 Twp. 40 N R. 61 E ; 2.5 km/(mi) NW OF Black Butte

Lat. _____ Long. _____ Elevation 5890 Quad. Black Butte

Sampler DEYMONAZ

Sample Type: Spring (with pipe), well (with pipe), (creek), river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR None

FLUID COLOR Clear

FLUID TASTE —

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM Small stream with gravel & silt bottom

DISCHARGE 800-1000 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#1
Pic #10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14362 Date 6/3/81 Time 1100

Name Marys River Location: Co. Elko State NV

Sec. NW-NE 12 Twp. 37N R. 59E ; 3.3 km (mi) N-NE OF Deeth

Lat. _____ Long. _____ Elevation 5390 Quad. Deeth.

Sampler Deymonaz

Sample Type: Spring (with pipe), well (with pipe), creek, (river) soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15.5 DISCHARGE 2-3000 (gpm) Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR Greenish PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION Green algae, grasses. ARTESIAN HEAD _____

FLUID ISSUES FROM _____ ROCK DATA:

_____ TYPE (SURFACE) Qal

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR & Cattle

QUANTITY _____ IMMEDIATE AREA USED FOR Rangeland

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC. (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#2
Pic #11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14363 Date 6/3/81 Time 1130

Name Unnamed Windmill Location: Co. Elko State Nv

Sec. NW-SE 7 Twp. 38N R. 59E ; 3 km/(mi) W-SW OF Twin Buttes

Lat. _____ Long. _____ Elevation 5603 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 18 DISCHARGE 3 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR None BORE 6"

FLUID COLOR clear PUMP TYPE Windmill

FLUID TASTE None STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING black iron - rusty

VEGETATION — ARTESIAN HEAD No

FLUID ISSUES FROM 2" galvanized steel pipe 60' from well head

ROCK DATA:

TYPE (SURFACE) Tuffs

COLOR Buff

SALT:

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Tuffs & minor gravels

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#3
Pic # 12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14364 Date 6/3/81 Time 1330

Name Unnamed Spring Location: Co. Elko State Nv

Sec. SW 18 Twp. 39N R. 58E; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 6340 Quad. Hanks Ck SW

Sampler Deymonaz

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12 DISCHARGE 1 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE None STATIC HEAD _____

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION Grasses & misc. plants ARTESIAN HEAD _____

FLUID ISSUES FROM Rubble covered hillside ROCK DATA:

_____ TYPE (SURFACE) Latite

_____ COLOR Med gray to black

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC. (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Aquifer along base of welded ash flow

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#4
Pic #13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14365 Date 6/3/81 Time 1600

Name Unnamed Spring Location: Co. Elko State Nv

Sec. SW 19 Twp. 40N R. 59E ; 6 km (mi) W OF Mala Vista Ranch

Lat. _____ Long. _____ Elevation 6540 Quad. Hot Spgs Ck.

Sampler Deymonaz

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11 DISCHARGE 3 (gpm/Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE None STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION — ARTESIAN HEAD _____

FLUID ISSUES FROM Small rocky hillside ROCK DATA:

TYPE (SURFACE) Latite.

COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR Stock

QUANTITY _____ IMMEDIATE AREA USED FOR Rangeland

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#5
Photo #14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14366 Date 6/3/81 Time 1700

Name Unnamed Spring Location: Co. Elko State Nv

Sec. SW-SW 32 Twp. 40 N R. 59 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 6480 Quad. Hot Spgs Ck

Sampler Deymonaz

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 18 (Probably some solar heating) DISCHARGE 1 (gpm) Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE None STATIC HEAD _____

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION _____ ARTESIAN HEAD _____

FLUID ISSUES FROM 1½" steel pipe Fed by small Fenced pond over spg. ROCK DATA:

TYPE (SURFACE) Latite Flows & Tuffs

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR Stock

QUANTITY _____ Rangeland

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#6
Pic #15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14367 Date 6/3/81 Time 1800

Name Marys River (AT M-R. Ranch) Location: Co. Elko State Nv

Sec. SE-SE 30 Twp. 40 N R. 60 E ; 1 km (mi) W. OF Mala Vista Ranch.

Lat. _____ Long. _____ Elevation 5580 Quad. Black Butte S.W

Sampler Deymonaz,

Sample Type: Spring (with pipe), well (with pipe), creek, (river), soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17.5 DISCHARGE 2-3000 (gpm) Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR None. BORE _____

FLUID COLOR Slightly greenish PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION green algae ARTESIAN HEAD _____

FLUID ISSUES FROM River. ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR Stock Ranching

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

#7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14368 Date 6/3/81 Time 1930

Name Marys River-at Twin Butte Location: Co. Elko State Nv.

Sec. NE-NW 2 Twp. 38 N R. 59 E ; 0.5 km/mi E OF Twin Buttes

Lat. _____ Long. _____ Elevation 5480 Quad. Twin Buttes

Sampler Deymonaz

Sample Type: Spring (with pipe), well (with pipe), creek, (river), soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17

GROUND TEMP. °C —

AIR TEMP. —

ODOR No

FLUID COLOR Slightly greenish

FLUID TASTE None

BUBBLING _____

BOILING _____

VEGETATION _____

FLUID ISSUES FROM Stream

DISCHARGE 3000 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Qal

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Stock Rangeland

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14369 Date 06/29/81 Time 0400 HOURS

Name GEOTHERMAL WELL 860 - 41 - 16 Location: Co. ELKO State NV.

Sec. NE¼ NW¼ 16 Twp. ~~16~~ 41N R. ~~41~~ 52E ; ^ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5835 Quad. TUSCARORA

Sampler AVERY

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow WELL IN PROGRESS w/ 9 5/8" CASING.

DESCRIPTION:

WATER TEMP. °C 28.89 DISCHARGE 250 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 58° F DEPTH 1100

ODOR NONE BORE 8 5/8" TRICONE

FLUID COLOR NONE, (CLEAR) PUMP TYPE AIR LIFTING

FLUID TASTE NONE - POOR! STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION Sparse sage, grasses ARTESIAN HEAD _____

FLUID ISSUES FROM SPITTER HOSE ROCK DATA:

TYPE (SURFACE) GLACIAL OUTWASH

COLOR varied colored quartzites

SALT:

GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION CELADONITE

SINTER: RX TYPE (AT DEPTH) ALTERED TUFF

TYPE _____ WATER USED FOR IMMEDIATE AREA _____

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION AQUIFER

PROPERTY OWNED BY ELLISON RANCHING CO.

PREVIOUS AND/OR CURRENT LEASES AMAX

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14370 Date 06/28/80 Time 0700 HOURS

Name 860 - 41 - 16 Location: Co. ELKO State NV.

Sec. NE¼NW¼ 16 Twp. 41 N R. 52 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5835 Quad. TUSCARORA

Sampler MARK AVERY

Sample Type: Spring (with pipe) (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 26.66 DISCHARGE 150 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 60° F DEPTH 680'

ODOR – BORE 8 5/8" HAMMER

FLUID COLOR – cloudy PUMP TYPE AIR LIFTING

FLUID TASTE – STATIC HEAD –

BUBBLING – SCALING –

BOILING – TYPE OF PIPING –

VEGETATION – ARTESIAN HEAD –

FLUID ISSUES FROM SPLATTER HOSE ROCK DATA:

TYPE (SURFACE) GLACIAL OUTWASH

COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION celadonite, (silica, iron oxides).

SINTER: RX TYPE (AT DEPTH) flow (andesitic)

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, FAIR, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES AMAX

#1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14371 Date 11-14-81 Time 0930

Name Packing House Spg Location: Co. Beaver State UT,

Sec. NE-NE-NE 24 Twp. 27 S R. 13 W ; 0.5 km (mi) East OF Frisco site

Lat. _____ Long. _____ Elevation 6400 Quad. Frisco,

Sampler Deymonaz

Sample Type: [Spring] (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. ~ 2°C

ODOR Organic

FLUID COLOR Clear

FLUID TASTE —

BUBBLING —

BOILING —

VEGETATION Algae & grasses

FLUID ISSUES FROM Hole dug at old spring, cribbed w/ rotting timbers & in small building

DISCHARGE < 1 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Latites & tuffs

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Range land ~~No use~~. No use

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14372 Date 11-14-81 Time 1000

Name Squaw Spg Location: Co Beaver State Ut.

Sec. NE-SW 26 Twp. 27 S R. 13 W ~~0.5~~ 1.0 km/(mi) ~~East~~ North of Squaw Pk ~~Fristo site~~.

Lat. _____ Long. _____ Elevation 6000 Quad. Fristo.

Sampler Deymonaz

Sample Type: (Spring (with pipe)) well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11 DISCHARGE ~ 1 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 14 DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE _____ STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION Green algae ARTESIAN HEAD _____

FLUID ISSUES FROM Rusty 1½" steel pip 30' from adit. Water pooled back in collapsed shallow adit.

ROCK DATA:

TYPE (SURFACE) Horn Silver Andesite.

COLOR Red

GRAIN SIZE Porphyritic

MEGASCOPIC MINERALS Plag, h.b, magnetite

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER:

RX TYPE (AT DEPTH) Carbonate or granitic.

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR No use.

QUANTITY _____ Rangeland

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Fit acting as vertical aquifer

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W-14373 Date _____ Time _____

Name WATER SAMPLE FROM FREEPORT MINERAL HOLE 860- Location: Co. Elko State Nv

Sec. SE-SE-NE 8 Twp. 41 N R. 52 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5850 Quad. Tuscarora

Sampler Deymonaz

Sample Type: Spring (with pipe), (well) (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 90

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR H_2S

FLUID COLOR Clear

FLUID TASTE H_2S

BUBBLING Yes

BOILING Yes

VEGETATION —

FLUID ISSUES FROM 6" Freeport min. hole drilled in Tuffaceous sediments Tts. Aquifer at ~200'

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 30-80 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Siliceous sinter

COLOR white

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION Pyrite

RX TYPE (AT DEPTH) Tts

WATER USED FOR IMMEDIATE AREA —

USED FOR Rangeland

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 8a Sample No. W 14374 Date 07/14/81 Time 0908

Name HOT SULPHUR SPRINGS Location: Co. Elko State Nv

Sec. SW¼NE¼ 8 Twp. 41 N R. 52 E ; km/mi OF

Lat. Long. Elevation 5760 Quad. TUSCARORA

Sampler MARK AVERY

Sample Type: (Spring) ~~(with pipe)~~, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 90

GROUND TEMP. °C 29

AIR TEMP. 21° C

ODOR H_2S

FLUID COLOR clear

FLUID TASTE

BUBBLING ✓ Yes

BOILING

VEGETATION

FLUID ISSUES FROM small spring - hole in group of four such springs - marked by stake "8a" (Dean Pilkington)

SALT:

TYPE

QUANTITY

COLOR

FORM

SINTER:

TYPE

QUANTITY

COLOR

FORM

DISCHARGE approx. 25 ? (gpm)/Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) sinter, soil

COLOR white-gray

GRAIN SIZE

MEGASCOPIC MINERALS

ALTERATION

RX TYPE (AT DEPTH)

WATER USED FOR IMMEDIATE AREA USED FOR

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION

PROPERTY OWNED BY

PREVIOUS AND/OR CURRENT LEASES AMAX / SUPRON — TUSCARORA (860)

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 5a Sample No. W 14375 Date 07/14/81 Time 1017

Name UPPER FUMAROLIC HOT SULPHUR SPRINGS Location: Co. ELKO State NEVADA

Sec. NE¼SE¼ 5 Twp. 41N R. 52E ; km/mi OF

Lat. Long. Elevation 5780 ? Quad. TUSCARORA

Sampler MARK AVERY

Sample Type: (spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 95°C

GROUND TEMP. °C 30°C

AIR TEMP. 22°C

ODOR H_2S

FLUID COLOR clear

FLUID TASTE —

BUBBLING yes

BOILING yes

VEGETATION grasses, sunflowers, plants.

FLUID ISSUES FROM bubbling & spitting fumarolic type vent/spring opening. steam present!

SALT:

TYPE

QUANTITY

COLOR

FORM

SINTER:

TYPE siliceous

QUANTITY

COLOR white — w/ oxidation bands — red. green celadonite in alt. volcanics

FORM

DISCHARGE approx. 50 (gpm)/Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) sinter, volcanics

COLOR

GRAIN SIZE

MEGASCOPIC MINERALS

ALTERATION

RX TYPE (AT DEPTH)

WATER USED FOR IMMEDIATE AREA USED FOR

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION

PROPERTY OWNED BY

PREVIOUS AND/OR CURRENT LEASES AMAX GEOTHERMAL

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14376 Date 08/11/81 Time 0900

Name "Andesite Cold Spring" (UNOFFICIAL) Location: Co. _____ State _____

Sec. NW1/4 SW1/4 19 Twp. 41N R. 52E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5650' approx Quad. TOSCARORA

Sampler MARK A AVERY

Sample Type: Spring ~~(with pipe)~~, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14.5

GROUND TEMP. °C 18

AIR TEMP. 20°C

ODOR none

FLUID COLOR clear

FLUID TASTE normal (good)

BUBBLING no

BOILING no

VEGETATION grasses, low vegetation, sage

FLUID ISSUES FROM ground (seep)

DISCHARGE < 1.0 ~~→~~ 2.0 gpm/Lpm
poss. winter flow rate

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) andesite flow rocks (Tal) with siliceous veins, fillings (opal).

COLOR grey - greyish green

GRAIN SIZE course - porphyritic

MEGASCOPIC MINERALS feldspar (plagioclase), quartz.

ALTERATION of feldspar to clay; silicious replacement veins, and fracture fillings.

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR cows drink from seep area.

QUALITY OF SAMPLE: EXC., GOOD, ~~FAIR~~ POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION fault controlled seepage ?

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM (W 14377)

Spring No. _____ Sample No. W 14377 Date 09/09/81 Time 1650

Name Gilbert Spring Location: Co. LANDER State NEVADA

Sec. SE1/4 34 Twp. 21N R. 40E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 7480' Quad. MOUNT AIRY NW

Sampler MARK AVERY

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10 DISCHARGE 10-15 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 24° C DEPTH _____

ODOR NONE BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE O.K. STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION SPARSE GRASSES, SAGE ARTESIAN HEAD _____

FLUID ISSUES FROM 3" diameter pipe from hillside ROCK DATA:

TYPE (SURFACE) Tph (Havalla Fm)

COLOR green-brown cherts, silt st, ss.

SALT:

GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS SiO2

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA Cows

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES ? _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 1 Sample No. W 14378 Date 09/09/81 Time 1300

Name Unnamed Spring - News Pass Area Location: Co. Lander State Nev.

Sec. SE 1/4 Twp. 20 N R. 40 E ; km/mi OF

approximate Lat. 39° 37' 30" Long. 117° 26' Elevation 6970' Quad. MOUNT AIRY 7.5'

Sampler MARK A. AVERY NOTE: this spring is on southern edge of base map for McCoy Project. 864.

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17°C

GROUND TEMP. °C 24°C

AIR TEMP.

ODOR none

FLUID COLOR clear

FLUID TASTE good

BUBBLING no

BOILING no

VEGETATION sparse sage, grasses

FLUID ISSUES FROM 1 3/4" ABC Pipe from spring orifice now buried, cemented.

SALT:

TYPE

QUANTITY

COLOR

FORM

SINTER:

TYPE

QUANTITY

COLOR

FORM

DISCHARGE 25.0 (gpm) Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Tertiary rhyolitic flows (Tec)

COLOR reddish brown

GRAIN SIZE aphanitic groundmass

MEGASCOPIC MINERALS sanidine, qtz,

ALTERATION none

RX TYPE (AT DEPTH)

WATER USED FOR IMMEDIATE AREA USED FOR

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION seep along fractures in valley-stream bedrock. (Tec)

PROPERTY OWNED BY ranching, spring improvements by Burt Gondolfo, Austin, Nev.

PREVIOUS AND/OR CURRENT LEASES

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14379 Date 09/13/81 Time 1400

Name Unnamed Spring Location: Co. Churchill State Nevada

Sec. NW¼ SW¼ 9 Twp. 22N R. 38E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5800' Quad. _____

Sampler MARK A AVERY

Sample Type: (Spring) ~~(with pipe)~~, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C DISCHARGE 2.0 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. ~~25~~ 25.5°C DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE o.k. STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION sparse - sage & grasses ARTESIAN HEAD _____

FLUID ISSUES FROM seeping spring (ground) ROCK DATA:

TYPE (SURFACE) Tertiary rhyolites

COLOR _____

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR _____

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (Fair) POOR

PROBABLE CAUSE OF MANIFESTATION seep along fractures

PROPERTY OWNED BY - B.L.M.

PREVIOUS AND/OR CURRENT LEASES - _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14380 Date 09/13/81 Time 1202

Name SHOSHONE MEADOWS SPRING Location: Co. _____ State _____

Sec. SE 1/4 (2) Twp. 22 N R. 38 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. SHOSHONE MEADOWS

Sampler MARK AVERY

Sample Type: (Spring) (~~with pipe~~), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 35°C

GROUND TEMP. °C _____

AIR TEMP. 26°C

ODOR organic - "swampy"

FLUID COLOR clear

FLUID TASTE —

BUBBLING —

BOILING —

VEGETATION grasses, sage

FLUID ISSUES FROM seep into puddle cows and horses may have stepped in sampled water.

DISCHARGE 1.0 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Tertiary rhyolite

COLOR brown

GRAIN SIZE sanidine, biotite,

MEGASCOPIC MINERALS Qtz. in aphanitic groundmass.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION —

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR horses, cows watering, grazing

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION seep

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14381 Date 09/14/81 Time 1157

Name Spring (Unnamed) Edwards Creek LAKE SHORE Location: Co. LANDER State NEVADA

Sec. SW¼ SW¼ 18 Twp. 21N R. 39E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5120 (approx.) Quad. Edwards Creek Valley

Sampler MARK A. AVERY

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14 DISCHARGE 5.0 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 26°C DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE great STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION sparse sage, grasses ARTESIAN HEAD _____

FLUID ISSUES FROM 3/4" steel pipe from modified spring orifice (cemented). [drainage (seep) from Clan Alpine Mtns.]

ROCK DATA:

TYPE (SURFACE) alluvium + lacustrine deposits.

COLOR _____

GRAIN SIZE sand, silt

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION —

SINTER:

RX TYPE (AT DEPTH) same as surface probably.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR watering horses

QUALITY OF SAMPLE (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Seep

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14382 Date 09/14/81 Time 1300

Name SMOOTH CANYON SPRING Location: Co. CHURCHILL State NEVADA

Sec. NW 1/4 10 Twp. 21N. R. 38E. ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5,950' Quad. SHOSHONE MEADOWS

Sampler MARK AVERY

Sample Type: (Spring) ~~(with pipe)~~, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15 DISCHARGE _____ gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 26.5 DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION sparse sage, pine, juniper ARTESIAN HEAD _____

FLUID ISSUES FROM stream bed spring (seep)

~~possible~~ fracture (fault) in andesite ROCK DATA:

TYPE (SURFACE) andesite - dark brown

COLOR dark brown

SALT:

GRAIN SIZE aphanitic

MEGASCOPIC MINERALS large tabular x-tals as calcite (fracture fillings)

TYPE _____

QUANTITY _____ ~~clay~~ chlorite (alteration).

COLOR _____ (sample sent w/ water sample - Dean).

FORM _____ ALTERATION chlorite

SINTER: RX TYPE (AT DEPTH) unknown

TYPE _____ WATER USED FOR watering hole

QUANTITY _____ IMMEDIATE AREA USED FOR (natural)

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION fracture / fault controlled seepage.

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES none

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14383 Date 09/15/81 Time 1200

Name Unamed (Dixie Valley) Spring Location: Co. CHURCHILL State NEVADA

Sec. SE 1/4 16 Twp. 25N R. 39E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4880 Quad. _____ (see base map)

Sampler MARK AVERY

Sample Type: (Spring) ~~(with pipe)~~, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14° DISCHARGE 2-3.0 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 26°C DEPTH _____

ODOR NONE BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION SPARSE GRASSES, SAGE ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN SHALEY LS. ROCK DATA:

_____ TYPE (SURFACE) FAVRETT FM. (fossiliferous)

_____ COLOR BRWNISH-GRAY

SALT: GRAIN SIZE F.G.

TYPE _____ MEGASCOPIC MINERALS CALCITE

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA Wild Horses Water Here

QUANTITY _____ USED FOR _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION fractures in Favret - along Stream bed

PROPERTY OWNED BY B.L.M

PREVIOUS AND/OR CURRENT LEASES NONE

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14384 Date 09/15/81 Time 1300

Name UNNAMED SPRING (N OF FAIRETT CNYN) Location: Co CHURCHILL State NEV.

Sec. NW¼ 1 Twp. 25N R. 39E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4590 Quad. _____ (see base map)

Sampler MARK AVERY

Sample Type: (Spring) (~~with pipe~~), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15

GROUND TEMP. °C _____

AIR TEMP. 27°C

ODOR NONE

FLUID COLOR O.K clear w/ few particles

FLUID TASTE O.K

BUBBLING NO

BOILING NO

VEGETATION V. SPARSE SAGE,

FLUID ISSUES FROM SEEP IN TRIASSIC AUGUSTA MTN. SEQUENCE LS - IN STREAM BED. (PICTURE TAKEN)

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1.0 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) LS Augusta Mtn. Sequence

COLOR gray, massive, w/ shaley interbeds up stream

GRAIN SIZE @ V.F.G.

MEGASCOPIC MINERALS Calcite as veins

ALTERATION none

RX TYPE (AT DEPTH) same sequence.

WATER USED FOR IMMEDIATE AREA USED FOR horse watering (wild)

QUALITY OF SAMPLE: EXC., GOOD, (FAIR) POOR

PROBABLE CAUSE OF MANIFESTATION seep in stream-bed

PROPERTY OWNED BY B.L.M.

PREVIOUS AND/OR CURRENT LEASES none

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14385 Date 09/16/81 Time 1300

Name Thompson Water Well Location: Co. Lander State Nevada

Sec. center, 10 Twp. 25N R. 41E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4980 approx. Quad. _____ (see base map)

Sampler MARK A AVERY

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10

GROUND TEMP. °C _____

AIR TEMP. 27 °C

ODOR NONE

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION SPARSE SAGE

FLUID ISSUES FROM 8" O.D. STEEL PIPE 40' from well head, ran 10 min. to clear.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 500+ (gpm) Lpm

WELL DATA:

DEPTH 300'

BORE -

PUMP TYPE electric

STATIC HEAD 65'

SCALING _____

TYPE OF PIPING 8" O.D. STEEL

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Sandy soil

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) unknown, probably Trhyolites

WATER USED FOR IMMEDIATE AREA USED FOR irrigation

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY FISH CREEK RANCH - DAN THOMPSON, MANAGER

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14386 Date 09/16/81 Time 1100 HRS.

Name HESS SPRING Location: Co. LANDER State NEVADA

Sec. 29 Twp. 26N R. 41E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5560' Quad. _____ (see base map)

Sampler MARK AVERY

Sample Type: (Spring) (~~with pipe~~), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15.0 DISCHARGE 2-3.0 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 25.5° C DEPTH _____

ODOR NONE BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION SPARSE GRASS, SAGE ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN HILLSIDE ROCK DATA:

BOULDER COVERED SOIL - VOLCANIC TYPE (SURFACE) Tr rhyolite flow rock

(RHYOLITE) FLOW ROCK COLOR gray-brown

SALT: GRAIN SIZE sanidine in aphanitic

TYPE _____ MEGASCOPIC MINERALS groundmass. Some calcic plagioclase x-tals Biotite.

QUANTITY _____

COLOR _____

FORM _____ ALTERATION NONE EVIDENT

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR Wild Horse Water Here

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Fractures along jointing in rhyolite units.

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES NONE KNOWN OF

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14387 Date 09/16/81 Time 1300

Name "RED BUTTE WW" Location: Co. LANDER State NEV.

Sec. SE 1/4 26 Twp. 25N R. 41E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4940 Quad. _____ (see base map)

Sampler MARK AVERY

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10

GROUND TEMP. °C _____

AIR TEMP. 26° C

ODOR NONE

FLUID COLOR CLEAR

FLUID TASTE O.K.

BUBBLING NO

BOILING NO

VEGETATION PLOWED FIELD

FLUID ISSUES FROM 8" O.D. PIPE 10' FROM WELL

DISCHARGE approx. 2000 gpm/Lpm

WELL DATA:

DEPTH unknown

BORE "

PUMP TYPE electric

STATIC HEAD probably 65-75'

SCALING none

TYPE OF PIPING 8" steel O.D.

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) soil - sandy volcanics

COLOR at red butte are rhyolitic.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA Irrigation

USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY NO ONE @ HOME !

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14388 Date Sept Time _____

Name Swanson W.W Location: Co. Lander State NV

Sec. Center 31 Twp. 25N R. 41E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler Mark Avery

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR _____

FLUID COLOR clear

FLUID TASTE None

BUBBLING NO

BOILING NO

VEGETATION _____

FLUID ISSUES FROM _____

_____

_____

SALT:

TYPE _____

QUANTITY NA

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 100 gpm/~~l pm~~

WELL DATA:

DEPTH Unknown

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) al

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

_____

_____

ALTERATION _____

RX TYPE (AT DEPTH) NA

WATER USED FOR IMMEDIATE AREA _____

USED FOR _____

_____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14500 Date 8/7/81 Time _____

Name Spring Location: Co. Malheur State OR

Sec. NW NE 24 Twp. 17S R. 42E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. Brogan

Sampler Bill Huntsman

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14 DISCHARGE 2-3 (gpm/Lpm)

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR _____ BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE None STATIC HEAD _____

BUBBLING NA SCALING _____

BOILING NA TYPE OF PIPING _____

VEGETATION _____ ARTESIAN HEAD _____

FLUID ISSUES FROM Pipe ROCK DATA:

_____ TYPE (SURFACE) _____

_____ COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY NA

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY NA

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14700 Date 05/25/81 Time 1700

Name WARM SPRINGS MERCURY DEPOSIT Location: Co. HUNDER State NEV.

Sec. _____ Twp. 27N R. 43E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4,800 Quad. _____

Sampler MARK AVERY

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, (sinter), travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 53 DISCHARGE 40-50 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 60° F DEPTH _____

ODOR none BORE _____

FLUID COLOR none PUMP TYPE _____

FLUID TASTE slt metallic? STATIC HEAD _____

BUBBLING yes SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION sparse brush/meadow grasses ARTESIAN HEAD _____

FLUID ISSUES FROM spring w/ opening about 1' diameter, depth unknown. ROCK DATA:

TYPE (SURFACE) sinter, volcanics

COLOR gray

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE siliceous and calcareous WATER USED FOR IMMEDIATE AREA _____

QUANTITY one large mound 20' x 30' USED FOR _____

COLOR gray - white stringers _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION fault controlled springs (N-S)

PROPERTY OWNED BY Henry [redacted] Filippini

PREVIOUS AND/OR CURRENT LEASES unknown

WA 1-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 14726 Sample No. 14726 Date 7-23-81 Time 10:00 Am

Name Vulcan mtn. Spring Location: Co. Ferry State WA

E 13.0 Sec. 9 Twp. 40N R. 33E ;4443 km/mi _____ OF _____

N 39.7 Lat. _____ Long. _____ Elevation 4100 ft. Quad. Curlew

Sampler W.A. + D.G.

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR Clear

FLUID TASTE O.K.

BUBBLING No

BOILING No

VEGETATION Yes; grass, trees

FLUID ISSUES FROM Muddy ground near mouth of small valley

SALT: None

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER: None

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 2-4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium containing blocks + boulders of igneous (silicic vol. rx.) and metamorphic rocks. (phyllites + greenstone)

COLOR _____

GRAIN SIZE MEGASCOPIC MINERALS _____

ALTERATION None visible

RX TYPE (AT DEPTH) Metamorphics (?)

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION meteoric H2O channeled down valley (?)

PROPERTY OWNED BY In Colville National Forest

PREVIOUS AND/OR CURRENT LEASES —

WA 1-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14727 Date 7-23-81 Time ~ 11:00 AM

Name — Location: Co. Ferry State WA

E 6.75 Sec. 7 Twp. 40N R. 33E ; 2311 km/mi _____ OF _____

N 26.0 Lat. _____ Long. _____ Elevation 2520 Quad. Curlew

Sampler W.A. + D.G.

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM pipe into trough. H_2O also seeps out nearby in mud.

SALT: None

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER: None

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 6 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by granite or granodiorite.

COLOR lt. grey

GRAIN SIZE ≤1mm (commonly)

MEGASCOPIC MINERALS faintly banded biotite, K-sper, and qtz.

ALTERATION None visible

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR possibly for cattle

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Rainwater seep?

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO D.G.+V.A.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 14728 Sample No. 14728 Date 7/23/81 Time 2:00P.M.

Name MAGNETIC MINE SPRING Location: Co. OKANOGAN State WA.

Sec. 13 Twp. 40N R. 30E ; 243 km/mi _____ OF _____

E 2.55 N 37.3

Lat. _____ Long. _____ Elevation 4550' Quad. BODIE MTN 15'

Sampler D. GRAGG, W AVRAMENKO

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C —

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING —

BOILING —

VEGETATION ABUNDANT

FLUID ISSUES FROM COLUVIUM IN SPRING CHANNEL

SALT:

TYPE NONE

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE NONE

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLUVIUM

COLOR DK BROWN

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) granodiorite?

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER ISSUING FROM STREAM CHANNEL

PROPERTY OWNED BY U.S. GOVERNMENT (?)

PREVIOUS AND/OR CURRENT LEASES ?

PHOTO WA 1-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14729 Date 7/23/81 Time 3:00PM

Name MAGNETIC MINE LOWER ADIT Location: Co. OKANOGAN State WA

E 2.3 Sec. 13 Twp. 40N R. 30E ; 443 km/mi _____ OF _____

N 37.0 Lat. _____ Long. _____ Elevation 4800' Quad. BODIE MTN 15'

Sampler D. CRAGG, W AVRAMENKO

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM LOWER ADIT IN MAGNETIC MINE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE _____ gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLUVIUM

COLOR DK BROWN

GRAIN SIZE >2 mm

MEGASCOPIC MINERALS GARNET, QUARTZ, CALCITE, PYRROTITE, PENTLANDITE, EPIDOTE, MAGNETITE

ALTERATION EPIDOTE & GARNET

RX TYPE (AT DEPTH) DIORITE OR GABBRO?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER(?) ISSUES FROM MINE

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo WA1-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14730 Date 7-23-81 Time ~4:30 pm

Name — Location: Co. Okanogan State WA

E 15.5 Sec. 2 Twp. 39N R. 31E ; 211 km/mi _____ OF _____

N 29.6 Lat. _____ Long. _____ Elevation 3100 ft Quad. Bodie mtn.

Sampler W.A. + D.G.

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C

GROUND TEMP. °C —

AIR TEMP. 22°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM soil on hillside. Well dug in hillside feeds tube which emptys into trough.

SALT:

TYPE Calcium carbonate

QUANTITY crust covers some

COLOR of the rocks visible

FORM on the surface.

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~.5 gpm (Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Volcaniclastic Sediments + tuffs

COLOR Buff

GRAIN SIZE Contain pebbles to

MEGASCOPIC MINERALS sand size pieces of tephra and lithic clasts. Sandstones + conglomerates

ALTERATION None visible

RX TYPE (AT DEPTH) Same + flows of intermediate to silicic lavas

WATER USED FOR IMMEDIATE AREA USED FOR Not in use at moment

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Water table intersecting surface at base of steep slope

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES —

No photo.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14731 Date 7-26-81 Time ~10:30 AM

Name Sanpoil River spring Location: Co. Ferry State WA

E 23.8 Sec. 20 Twp. 37 N R. 34 E ; 133 km/mi _____ OF _____

N 33.9 Lat. _____ Long. _____ Elevation 3575 Quad. Republic

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7.5°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium near base of valley wall.

DISCHARGE changes from muddy seep to stream with ~ 10 gpm flow gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Diorite

COLOR med. grey

GRAIN SIZE ~≤ 3mm

MEGASCOPIC MINERALS Feldsper, hornblende, magnetite

ALTERATION None

RX TYPE (AT DEPTH) Same

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR recreation (camping)

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Stream H2O surfacing in valley?

PROPERTY OWNED BY Colville Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

WA 1-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14732 Date 7/26/81 Time 10:30

Name _____ Location: Co. FERRY State WA

E 26.05 Sec. 444 sec 17 Twp. 37N R. 34E; _____ km/mi _____ OF _____

N 35.05 Lat. _____ Long. _____ Elevation 4450 Quad. REPUBLIC 15'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN MEADOW

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Colluvium & SOIL

COLOR DK BROWN

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION —

RX TYPE (AT DEPTH) DIORITE

WATER USED FOR CATTLE

IMMEDIATE AREA USED FOR GRAZING

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

WA 1-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14733 Date 7/26/81 Time 11:15

Name _____ Location: Co. FERRY State WA

E 28.0 Sec. 434 sec 16 Twp. 37N R. 34E ; _____ km/mi _____ OF _____

N 35.1 Lat. _____ Long. _____ Elevation 4750' Quad. REPULIC 15'

Sampler D. GRAGO

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8.5°C DISCHARGE 4 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM PIPE WHICH IS DRIVEN INTO GROUND IN A MEADOW ROCK DATA:

TYPE (SURFACE) SOIL

COLOR DK BROWN

SALT:

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) DIORITE

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR STOCK GRAZING

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

WA 1-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14734 Date 7/26/81 Time 11:30

Name _____ Location: Co. FERRY State WA

E 28.4 Sec. 34 SEC 21 Twp. 37N R. 34E ; _____ km/mi _____ OF _____

N 33.8 Lat. _____ Long. _____ Elevation 4500' Quad. REPUBLIC 15'

Sampler D. GRAGG

Sample Type: (Spring (with pipe)) ← RUBBER HOSE, well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM RUBBER HOSE CONNECT TO PIPE DRIVEN IN HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 gpm (Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR DK BROWN

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) DIORITE

WATER USED FOR IMMEDIATE AREA USED FOR STOCK GRAZING

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo WA1-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14735 Date 7-26-81 Time 1:00 PM

E 23.1
N 22.3

Name Powerline Spring Location: Co. Ferry State WA

Sec. 16 Twp. 36N R. 34E ; 122 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4150' Quad. Republic

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12.5°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM black mud and gravel. From fractures (or faults?) in nearby country rock?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep to <2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Granodiorite

COLOR salt + pepper

GRAIN SIZE commonly ~ 1-2mm

MEGASCOPIC MINERALS Feldspar, biotite, with some hornblende and quartz.

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Circulating rainwater? "Solar" heated?

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 1-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14736 Date 7-26-81 Time 3:00 PM

Name — Location: Co. Ferry State WA

E 20.4
N 20.1

Sec. 17 Twp. 36N R. 34E ; 3441 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3800' Quad. Republic

Sampler WA + DG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Spring along the highway

WATER TEMP. °C 14°C

GROUND TEMP. °C —

AIR TEMP. 33°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Ok

BUBBLING No

BOILING No

VEGETATION (Landslide scar)

FLUID ISSUES FROM mudslide scars. Seeps From soil + gravel,

DISCHARGE Seep (~1-2 gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Fault zone along which greenstone (?) has been altered to serpentinite

COLOR Dk green

GRAIN SIZE —

MEGASCOPIC MINERALS Fine-grained

ALTERATION To serpentinite

RX TYPE (AT DEPTH) Same?

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., GOOD, (POOR) (Dirty)

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION H_2O circulating along fault?

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Photo WA1-1D

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14737 Date 7-26-91 Time 5:30 PM

Name Sitdown Spring Location: Co. Ferry State WA

Sec. 29 Twp. 34N R. 35E ; 143 km/mi _____ OF _____

E 8,8 Lat. _____ Long. _____ Elevation 3630' Quad. Twin Lakes

N 30.1 Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, ~~travertine~~, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ~ 6 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 28° C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM muddy meadow in "stream" channel. ROCK DATA:

TYPE (SURFACE) Quartzite

COLOR White

SALT:

GRAIN SIZE ~ 1/4 1mm

TYPE None MEGASCOPIC MINERALS Quartz, muscovite

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) Some + other metamorphics

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O re-surfacing in meadow along stream channel

PROPERTY OWNED BY Colville Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

Photo DG 1-10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14738 Date 7-28-81 Time 10:00 AM

Name Russell Spring Location: Co. Okanogan State WA

N 15.55 Sec. 25 Twp. 36N R. 31E ; 3232 km/mi _____ OF _____

E 13.8 Lat. _____ Long. _____ Elevation 4525' Quad. Aeneas

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C DISCHARGE ~ 1-2 gpm (Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM soil on hillside ROCK DATA:

TYPE (SURFACE) Granite

COLOR lt. pinkish grey

SALT: GRAIN SIZE Varies from 1-2mm

MEGASCOPIC MINERALS to pegmatite-like

TYPE None

QUANTITY _____ bodies, up to 1-2 cm,

COLOR _____ K-spar, qtz, biotite, garnet

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) Same?

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR recreation

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION circulation of rainwater on hillside (in rx. fractures)

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —


RUSSEL
SPRING

Photo DG 1-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14739 Date 7/27/81 Time 12:15

N 34.8 Name Six Mile Spring Location: Co. OKANOGAN State WA

E 9.3 Sec. 23 sec 16 Twp. 34N R. 31E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4400' Quad. BALD KNOB 15'

Sampler D. GRAGG, W. AVRAMENKO

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 45°C

GROUND TEMP. °C —

AIR TEMP. 28°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANITE

COLOR WHITE

GRAIN SIZE 2-6mm

MEGASCOPIC MINERALS K-spar, Qtz

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

RX TYPE (AT DEPTH) Same as above

WATER USED FOR IMMEDIATE AREA USED FOR LOGGING —

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG1-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14740 Date 7-28-81 Time 3:15 PM

N 42.7 Name Dugout mtn Spr. I Location: Co. Okanogan State WA

E 3,8 Sec. 32 Twp. 35N R. 31E ; 144 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4780' Quad. Bald Knob

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Yes, algae

FLUID ISSUES FROM alluvium on hillside.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 2 1-2 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Granite

COLOR lt grey

GRAIN SIZE up to 5 mm

MEGASCOPIC MINERALS quartz, K-spar, biotite, and bbl.

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Fluid issuing from fractures

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

DG 1-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14741 Date 7/28/81 Time 3:30

N 43.7 Name DUGOUT MTN SPR #2 Location: Co. OKANOGAN State WA

E 4.2 Sec. 11 2 sec 32 Twp. 35N R. 31E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5000' Quad. BALD KNOB 15'

Sampler D.GRAGG W.AVRAMENKO

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 24°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PHASTIC PIPE ON HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANITE

COLOR WHITE to TAN

GRAIN SIZE 2-3mm

MEGASCOPIC MINERALS QTZ, K-SPAR, BIOTITE

ALTERATION NONE

RX TYPE (AT DEPTH) SAME AS ABOVE

WATER USED FOR STOCK

IMMEDIATE AREA USED FOR GRAZING + LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY OKANOGAN N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG1-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14742 Date 7-28-81 Time 4:30 pm

N 36.8
E 1.35

Name _____ Location: Co. Okanogan State WA

Sec. ~10 Twp. 34N R. 30E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. Disautel (not in file)

Sampler WA + DG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM pipe drilled or dug into the alluvium.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~3 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Glacial Alluvium

COLOR Dk. brown

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Granite Cr visible

WATER USED FOR IMMEDIATE AREA USED FOR In nearby outcrops + as boulders in soil.)

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY Okanogan Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

DG1-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14743 Date 7-28-81 Time 5:00 PM

Name — Location: Co. Okanogan State WA

N 36.5 Sec. 12 Twp. 34N R. 31E ; 443 km/mi _____ OF _____

E 2.65 Lat. _____ Long. _____ Elevation 4375' Quad. Bald knob

Sampler WA + DG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 24°C Solar — DISCHARGE Seep gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 26°C — DEPTH _____

ODOR No — BORE _____

FLUID COLOR Clear — PUMP TYPE _____

FLUID TASTE ok — STATIC HEAD _____

BUBBLING No — SCALING _____

BOILING No — TYPE OF PIPING _____

VEGETATION Abundant — ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside and perhaps from fractures in bedrock which is very close. — ROCK DATA:

TYPE (SURFACE) Porphyritic Andesite

COLOR lt. grey

GRAIN SIZE up to 5mm

MEGASCOPIC MINERALS plagioclase + hornblende

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same (?)

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION Solar heated H_2O surfacing on hillside

PROPERTY OWNED BY Okanogan Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

WA 1-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14744 Date 7/30/81 Time 10:45 AM

Name First Butte Spring Location: Co OKANOGAN State WASH

N 22.9
E 16.9

Sec. 8 433 Twp. 36N R. 22E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4960 Quad. Doe Mountain

Sampler WA. BH

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5 DISCHARGE 2.5 lpm gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR no BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION abundant ARTESIAN HEAD _____

FLUID ISSUES FROM plastic pipe of soil ROCK DATA:

_____ TYPE (SURFACE) granite

_____ COLOR white

SALT: GRAIN SIZE _____

TYPE no MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE no WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Seep - rain water

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES _____

BWA 1-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14745 Date 7/30/81 Time 1:30pm

Name Lewis Butte Spring Location: Co. OKAN State WASH

N 1.0

Sec. 28 234 Twp. 35N R. 21E ; _____ km/mi _____ OF _____

E 4.2

Lat. _____ Long. _____ Elevation 2320 Quad. Ave Mountain

Sampler WA BH

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C DISCHARGE 2 lpm gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE none STATIC HEAD _____

BUBBLING none SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION abundant ARTESIAN HEAD _____

FLUID ISSUES FROM Seep ROCK DATA:

_____ TYPE (SURFACE) _____

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE none MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE none WATER USED FOR _____

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION meteoric water

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

Photo WA1-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14746 Date 7-31-81 Time ~ 11:30 AM

Name — Location: Co. Okanogan State WA

N 14.7
E 14.55

Sec. 2 Twp. 36N R. 18E ; 113 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3960' Quad. Robinson Mtn

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6.5°C DISCHARGE ~ 12 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM fractures in sandstone. ROCK DATA:

TYPE (SURFACE) Sediments (S.S., shale, mudstones)

COLOR tan to black

SALT:

GRAIN SIZE variable

MEGASCOPIC MINERALS primarily quartz

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Not in use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O circulating in rock fractures

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

No Photo; in forest along roadside

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14747 Date 7-31-81 Time ~2:00 PM

Name Horse Gulch Spring Location: Co. Okanogan State WA

N 17.8 E 29.5

Sec. 20 Twp. 33N R. 21E ; 113 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3200' Quad. Buttermilk Butte

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 27°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in valley. H2O enters small, covered well. Surrounded by fence.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Sedimentary rocks, ss and congl.?

WATER USED FOR IMMEDIATE AREA USED FOR Not in use at the moment

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Surface intersects water table locally

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 1-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14748 Date 7-31-81 Time 5:00 PM

Name — Location: Co. Okanogan State WA

N 30.2 Sec. 30 Twp. 34N R. 21E ; 1314 km/mi _____ OF _____

E 27.0 Lat. _____ Long. _____ Elevation 3520' Quad. Buttermilk Butte

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ~ 1 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM pipe which probably leads uphill along small channel in forest. Surrounded by fence.

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by slightly metamorphosed sed. rocks, including conglomerates, shales, and sandstones (?). *

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Same

SALT: Probably issues from soil

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O circulating along fractures (?)

PROPERTY OWNED BY Okanogan Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

* There is some evidence (slickensides) that these rocks are locally faulted.

Photo WA1-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 14749 Date 7-31-81 Time 6:00 PM

Name — Location: Co. Okanogan State WA

N 29.2 Sec. 27 Twp. 34N R. 21E ; 3143 km/mi _____ OF _____

E 5.3 Lat. _____ Long. _____ Elevation 2600' Quad. Twisp

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Cows use this spring frequently!!

WATER TEMP. °C 12°C

GROUND TEMP. °C —

AIR TEMP. 27°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM soil in pasture. Issues from fractured rock?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by sed. rocks (congl., ss.)

COLOR brownish grey

GRAIN SIZE MEGASCOPIC MINERALS pebbles up to 1-2 cm.

ALTERATION None

RX TYPE (AT DEPTH) Deformed and slightly metamorphosed seds.

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION H_2O circulating through fractured rock?

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Duplicate

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14750 Date 05/28/81 Time 1200

Name SHOSHONE PASS WATER WELL Location: Co. CHURCHILL State NEV.

Sec. NW 32 Twp. 22N R. 39E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5320 Quad. Edwards Creek Valley 7½"

Sampler MARK AVERY

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 26.5

GROUND TEMP. °C _____

AIR TEMP. 68° F

ODOR none

FLUID COLOR clear

FLUID TASTE clear w/specks of FeO_3

BUBBLING NO

BOILING no

VEGETATION sparse sage

FLUID ISSUES FROM 2" O.D. pipe

DISCHARGE 60-70 gpm/Lpm

WELL DATA:

DEPTH UNKNOWN

BORE " (probably 6")

PUMP TYPE oil-well "see-saw" pump

STATIC HEAD unknown

SCALING iron oxides

TYPE OF PIPING galvanized steel pipe

ARTESIAN HEAD no

ROCK DATA:

TYPE (SURFACE) volcanic Tv ; tuffs

COLOR white - brown - reddish orange

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION aquifer

PROPERTY OWNED BY Hudson Oil & Ranch?

PREVIOUS AND/OR CURRENT LEASES unknown

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. ______ Sample No. W14975 Date 28/7/80 Time 1115

Name Spratling Well Location: Co. Elko State Co

Sec. SW1/4 30 Twp. 38N R. 60E ; 4.8 km/mi SW OF Tabor Flats

Lat. ______ Long. ______ Elevation 5450 Quad. Tabor Flats

Sampler D. Pilkington

Sample Type: Spring (with pipe), **well (with pipe)** [circled], creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C	13	DISCHARGE	2 gpm/Lpm
GROUND TEMP. °C		WELL DATA:	Drilled 1967
AIR TEMP.	24° C	DEPTH	147 feet
ODOR	None	BORE	NA
FLUID COLOR	Clear	PUMP TYPE	Jack leg / gas engine
FLUID TASTE	None	STATIC HEAD	NA
BUBBLING	NA	SCALING	none
BOILING	NA	TYPE OF PIPING	iron
VEGETATION	NA	ARTESIAN HEAD	NA
FLUID ISSUES FROM		ROCK DATA:	
		TYPE (SURFACE)	Humbolt FM
		COLOR	Buff
SALT:		GRAIN SIZE	silt to fine fine ss
TYPE		MEGASCOPIC MINERALS	Qtz Felds Clay
QUANTITY			
COLOR			
FORM		ALTERATION	None
SINTER:		RX TYPE (AT DEPTH)	Humbolt Fm
TYPE		WATER USED FOR	Stock
QUANTITY		IMMEDIATE AREA USED FOR	Seeded area - excellent stand of Crested wheat & Brome grass
COLOR			
FORM		QUALITY OF SAMPLE:	**EXC.** [circled], GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION ______

PROPERTY OWNED BY BLM - Stock well

PREVIOUS AND/OR CURRENT LEASES ______

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 14976 Date 28/7/80 Time 1200

Name BLM well Location: Co. Elko State Nevada

Sec. SW¼ 17 Twp. 38N R. 60E ; 32 km/mi West OF Tabor Flats

Lat. _____ Long. _____ Elevation 5450 Quad. Tabor Flats

Sampler D. Pilkington

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C _____

AIR TEMP. 25°C

ODOR None

FLUID COLOR Clear

FLUID TASTE None

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM —

DISCHARGE 5 gpm/~~Lpm~~

WELL DATA:

DEPTH ?

BORE NA

PUMP TYPE Jack leg/gas engine

STATIC HEAD NA

SCALING NA

TYPE OF PIPING Iron

ARTESIAN HEAD NA

ROCK DATA:

TYPE (SURFACE) Humboldt Fm

COLOR Buff

GRAIN SIZE Silt to vg fines

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Humboldt Fm

WATER USED FOR Stock

IMMEDIATE AREA USED FOR Grazing

QUALITY OF SAMPLE: EXC., GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. ______ Sample No. W14977 Date 28/7/80 Time 1230

Name Pearvey Well # 2 Location: Co. Elko State Nevada

Sec. NWSE Sec 7 Twp. 38N R. 60E ; 4.8 km/mi NW OF Tabor Flats

Lat. ______ Long. ______ Elevation 5520 Quad. Tabor Flats

Sampler D. Pilkington

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C	13° C	DISCHARGE	5 gpm/~~Lpm~~
GROUND TEMP. °C		WELL DATA:	
AIR TEMP.	27°C	DEPTH	326 Feet
ODOR	None	BORE	NA
FLUID COLOR	None	PUMP TYPE	Jack leg
FLUID TASTE	None	STATIC HEAD	NA
BUBBLING		SCALING	NA
BOILING		TYPE OF PIPING	Iron
VEGETATION		ARTESIAN HEAD	NA
FLUID ISSUES FROM		ROCK DATA:	
		TYPE (SURFACE)	Humbolt Fm
		COLOR	Buff
SALT:		GRAIN SIZE	silt and very fine SS
TYPE		MEGASCOPIC MINERALS	
QUANTITY			
COLOR			
FORM		ALTERATION	None
SINTER:		RX TYPE (AT DEPTH)	Humbolt Fm
TYPE		WATER USED FOR	Stock
QUANTITY		IMMEDIATE AREA USED FOR	Grazing - seeded area
COLOR			
FORM		QUALITY OF SAMPLE: EXC., GOOD, POOR	

PROBABLE CAUSE OF MANIFESTATION ______

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES ______

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14975 Date 28/7/80 Time 1535

Name Warm Springs Location: Co. Elko State Nevada

Sec. SE¼ 26 Twp. 37N R. 58E ; 40 km/~~mi~~ SE OF Morgan Hill

Lat. _____ Long. _____ Elevation 5360 Quad. Morgan Hill

Sampler D

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C

GROUND TEMP. °C _____

AIR TEMP. 24°C

ODOR None

FLUID COLOR clear

FLUID TASTE None

BUBBLING Some

BOILING No

VEGETATION green algae

FLUID ISSUES FROM spring comes out of alluvial material

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 30 gpm/~~Lpm~~

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Humboldt Fm

COLOR _____

GRAIN SIZE silt & sand - Ash

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Humboldt FM

WATER USED FOR stock

IMMEDIATE AREA USED FOR stock

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES _____

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W14982 Date 9/10/80 Time 11:45 am

Name Tuscarora Location: Co. ELKO State Nevada

Sec. NW SW 8 Twp. 41 N R. 52E ; 0.5 km/mi WSW OF Hot Sulphur Springs

Lat. _____ Long. _____ Elevation 5760 Quad. Tuscarora

Sampler D. Pilkington

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 57°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR faint H_2S

FLUID COLOR colorless

FLUID TASTE _____

BUBBLING Some

BOILING _____

VEGETATION red algae

FLUID ISSUES FROM top of wht sinter & travertine mound

DISCHARGE 3-5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) _____

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY _____

COLOR wht

FORM _____

ALTERATION _____

SINTER:

TYPE Siliceous & Calcareous

QUANTITY 300x300

COLOR grey. wht

FORM Mound

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY BLM

PREVIOUS AND/OR CURRENT LEASES Supron GT Lease

Photo DG1-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15011 Date 7-24-81 Time 11:00 AM

N 19.45 E 10.5 Name — Location: Co. Okanogan State WA

Sec. 21 Twp. 39N R. 31E ; 4341 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2540 Quad. Bodie mtn.

Sampler W.A. + D.G

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C —

AIR TEMP. 27°C

ODOR None

FLUID COLOR Clear

FLUID TASTE O.K.

BUBBLING No

BOILING No

VEGETATION Yes

FLUID ISSUES FROM roadbed at lake level. Fractures in rock at depth?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~8-10 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Rhyodacite tuff (?)

COLOR Tan

GRAIN SIZE 3mm max.

MEGASCOPIC MINERALS Hornblende, Feldspar (K-spar + plag?), biotite + some qtz. in fine matrix

ALTERATION None

RX TYPE (AT DEPTH) Same as above

WATER USED FOR IMMEDIATE AREA USED FOR Drains into lake

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Rainwater (?) circulating through fracture rock?

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 1-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15012 Date 7-24-81 Time ~ 11:30 AM

Name — Location: Co. Okanogan State WA

N 21.6
E 10.65

Sec. 21 Twp. 39N R. 31E ; 2122 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3350' Quad. Bodie Mtn.

Sampler WA + DG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ~ 1 (gpm/lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 22°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes, grass, trees, algae ARTESIAN HEAD _____

FLUID ISSUES FROM plastic pipe that enters ground. H_2O source questionable. Only 100' from spring which is now visibly dry. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR Brown

SALT:

GRAIN SIZE —

MEGASCOPIC MINERALS

TYPE None

QUANTITY _____ hbl., biot., Feldy + (Qtz ?)

COLOR _____

FORM _____ ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Float suggests andesite

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR flows + rhyodacite tuffs or flows.

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Circulation of H_2O through fractures in rock.

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

No Photo; too much vegetation

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15013 Date 7-24-81 Time 12:30 PM

Name Cargo Spring Location: Co. Ferry State WA

N 10.8 E 22.3

Sec. 8 Twp. 38N R. 32E ; 1141 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4320' Quad. Bodie mtn.

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C —

AIR TEMP. 18.5°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium covering valley floor. Issues over a large area

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 10 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA: (Alluvium)

TYPE (SURFACE) Granodiorite

COLOR Med. grey

GRAIN SIZE ~ 1mm

MEGASCOPIC MINERALS Feldspar, hornblende, biotite, + quartz

ALTERATION None visible

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR Feeds stream

QUALITY OF SAMPLE: EXC., (GOOD,) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O surfacing in stream valley?

PROPERTY OWNED BY Colville Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15014 Date 7/24/81 Time 1:30PM

Name KELLY MINE SPRING 2 Location: Co. FERRY State WA

N 9.5 E 24.6

Sec. 9 Twp. 38N R. 32E ; 313 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4725' Quad. BODIE MTN

Sampler D. GRAGG + W. AVRAMENKO

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, ~~travertine~~, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE IN COLLUVIUM

DISCHARGE 4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR DK BROWN

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE NONE

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE NONE

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR CATTLE GRAZING

CATTLE GRAZING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

NO Photo DG15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15015 Date 7-24-81 Time 4:30 PM

Name Aeneas Spring Location: Co. Okanogan State WA

N 7.1 Sec. 12 Twp. 35N R. 29E ; 3333 km/mi _____ OF _____

E 11.7 Lat. _____ Long. _____ Elevation 3550 Quad. Aeneas Valley

Sampler W.A. + D.G.

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Sample collected in the rain.

DESCRIPTION:

WATER TEMP. °C 5.5°C DISCHARGE ~ 4 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 17°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium (gravels) along side Aeneas Creek. Located in campground

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR Rich brown soil

SALT:

TYPE None GRAIN SIZE _____

QUANTITY _____ MEGASCOPIC MINERALS _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) _____

TYPE None WATER USED FOR IMMEDIATE AREA _____

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O surfacing?

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

No Photo DGG

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15016 Date 7-24-81 Time 5:00 PM

Name Aeneas Spring #2 Location: Co. Okanogan State WA

N 8.9 Sec. 11 Twp. 35N R. 29E ; 1411 km/mi _____ OF _____

E 9.8 Lat. _____ Long. _____ Elevation 3750' Quad. Aeneas Valley

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Heavy rains prior to sample collection.

WATER TEMP. °C 13.5°C

GROUND TEMP. °C —

AIR TEMP. 15°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM very muddy ground. Issues from many places over a Fairly large area

DISCHARGE ~ 2-5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium (mud)

COLOR Dk brown

GRAIN SIZE —

MEGASCOPIC MINERALS —

—

ALTERATION None

RX TYPE (AT DEPTH) Gneiss + phyllites (?) exposed in nearby roadcuts.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA Not in use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O surfacing

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo DG 1-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15017 Date 7/25/81 Time 11:30

Name _____ Location: Co. FERRY State WA

Sec. 33 | sec 26 Twp. 40N R. 35E ; _____ km/mi _____ OF _____

N 33.6

Lat. _____ Long. _____ Elevation ≈4440' Quad. TOBO MTN 15'

E 17.9

Sampler P. GRAGG, W. AVRAMENKO

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C _____

AIR TEMP. 27°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION LITTLE - BUT SEEP IN RD. CUT

FLUID ISSUES FROM SEEP IN ROAD CUT WHICH IS A COLLUVIUM

DISCHARGE ¼-½ gpm (Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM OF QTZ RICH GRANITIC RX

COLOR WHITE - LT GRAY

GRAIN SIZE 2mm - 4mm

MEGASCOPIC MINERALS QUARTZ, BIOTITE

ALTERATION FELDSPARS WX TO CLAYS

RX TYPE (AT DEPTH) ALTERED QTZ RICH GRANITIC RX

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR NO USED LOGGING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEP

PROPERTY OWNED BY IN COLVILLE NATIONAL FOREST

PREVIOUS AND/OR CURRENT LEASES CLAIM STAKE 100 yds WEST ON ROAD INDICATES THIS AREA FILED IN 1976 AS REB CLAIMS, JOHNNY LAVIS (?) INSPIRATION DEVELOPMENT CO., INSPIRATION AZ.

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15018 Date 7-25-81 Time ~12:00

Name — Location: Co. Ferry State WA

Sec. 32 Twp. 40N R. 36E ; 113 km/mi _____ OF _____

N 31.6 Lat. _____ Long. _____ Elevation 3200' Quad. Togo mtn.

E 25.7 Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: In all probability, this sample is probably meteoric water which surfaced in a small channel next to the main stream. Abundant H2O in area.

WATER TEMP. °C 8.5°C DISCHARGE Seep gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM mud (alluvium) in channel next to main stream. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR Dk brown - blk

SALT: GRAIN SIZE —

TYPE None MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) metamorphics

TYPE None WATER USED FOR ((Gneiss)

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____ No use.

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Colville Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

DG 1-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15019 Date 7/25/81 Time 2:30PM

Name NEAR ONION CREEK Location: Co. FERRY State WA

Sec. 14 (sec 30) Twp. 40N R. 36E ; _____ km/mi _____ OF _____

N 33.6 Lat. _____ Long. _____ Elevation 3850' Quad. TOGO MTN 15'

E 23,95 Sampler D. GRAGO, W. AVRAMENKO

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C DISCHARGE ½ gpm/(Lpm)

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP ROCK DATA:

_____ TYPE (SURFACE) MARBLE

_____ COLOR WHITE

SALT: GRAIN SIZE 2mm

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) ?

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR CATTLE GRAZING + LOGGING

QUANTITY _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE NATIONAL FOREST

PREVIOUS AND/OR CURRENT LEASES ?

NO Photo DG 1-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15020 Date 7-25-81 Time ~5:00 PM

Name Taylor Ridge Spring Location: Co. Ferry State WA

Sec. 14 Twp. 38N R. 35E ;1133 km/mi _____ OF _____

N 8.0

Lat. _____ Long. _____ Elevation 5280' Quad. Togo Mountain

E 18.0

Sampler DG + WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: 98% chance that this sample is merely stream water. "Spring" issues from covered portion of channel.

WATER TEMP. °C 8°C DISCHARGE ~ 5 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in stream channel. Probably stream H2O re-emerging.

ROCK DATA:

TYPE (SURFACE) Slightly metamorphosed granite

COLOR light grey

GRAIN SIZE commonly ≤ 2mm

MEGASCOPIC MINERALS Feldspar (predominantly K-spar), biotite, quartz, and some hornblende. Some lineation.

ALTERATION No

RX TYPE (AT DEPTH) Same

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Recreation

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric stream H2O re-emerging in channel

PROPERTY OWNED BY Colville Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

PHOTO D6 1-16
1-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15021 Date 7/30/81 Time 11:15

Name APACHE MINE Location: Co OKANOGAN State WA

Sec. 342 sec 27 Twp. T31N R. 30E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2320' Quad. ALAMEDA FLAT 15'

Sampler D. GRAGG

N 28
E 27.3

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10.5°C

GROUND TEMP. °C _____

AIR TEMP. 25°C

ODOR _____

FLUID COLOR BROWN

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION SPARSE

FLUID ISSUES FROM ADIT MOUTH AT APACHE MINE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ? mine seep gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) QTZ. MONZONITE PORPHYRY

COLOR WHITE – LT GRAY

GRAIN SIZE 1mm – 40mm

MEGASCOPIC MINERALS K-spar, plagioclase, biotite, epidote, QUARTZ, SULPHIDE, PYRITE,

ALTERATION SULFIDE WX

RX TYPE (AT DEPTH) SAME AS ABOVE

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK GRAZING

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING DOWN INTO MINE

PROPERTY OWNED BY COLVILLE INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 1-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15022 Date 7/30/81 Time 2:30

Name CONDON SPRINGS Location: Co. OKANOGAN State WA

Sec. 523 Sec 19 Twp. 31E R. 30E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1600' Quad. ALAMEDA FLAT 15'

N 29.85
E 18.25

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 19°C (Solar) DISCHARGE 5 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP JUST BELOW THE CONFLUENCE OF TWO CREEKS ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR DK BR SOIL

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS BOULDERS TO FINE SANDS

QUANTITY _____

COLOR _____

FORM _____ ALTERATION —

SINTER: RX TYPE (AT DEPTH) MONZONITE

TYPE _____ WATER USED FOR LIVESTOCK

QUANTITY _____ IMMEDIATE AREA USED FOR GRAZING

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER FROM THE TWO NEARBY STREAMS

PROPERTY OWNED BY COLVILLE INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

NO Photo ~~DGT 79~~

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15023 Date 7/30/81 Time 4:45

Name _____ Location: Co. OKANOGAN State WA

Sec. 431 sec. 14 Twp. 32N R. 29E ; _____ km/mi _____ OF _____

N 4.2
E 12.65

Lat. _____ Long. _____ Elevation 3120' Quad. DISAUTEL 15'

Sampler D. GRAGO

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C —

AIR TEMP. 19.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN CREEK BED ALLUVIUM

DISCHARGE 2 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANITE

COLOR PINK

GRAIN SIZE 1 - 4 mm

MEGASCOPIC MINERALS K-spar, plagioclase, quartz, Biotite

ALTERATION _____

RX TYPE (AT DEPTH) _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR NOTHING ROADSIDE TURN OUT, NO SIGN OF LIVESTOCK

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

NO Photo ~~DS-1-CO~~

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15024 Date 7/30/81 Time 6:15PM

Name _____ Location: Co. OKANOGAN State WA

Sec. 424 sec 36 Twp. 33N R. 29E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3480' Quad. DISAUTEL 15'

Sampler D. GRAGG

N 11.2
E 17.1

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C (solar) DISCHARGE SEEP gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 18°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR DIRTY PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP JUST ABOVE CREEK ROCK DATA:

TYPE (SURFACE) COLLUVIAL DEPOSITS

COLOR DK BR

SALT: GRAIN SIZE FINE SAND - BOULDERS

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) GRANITE

TYPE _____ WATER USED FOR IMMEDIATE AREA LIVESTOCK

QUANTITY _____ USED FOR GRAZING & LOGGING

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR) FILTER

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY COLVILLE INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15025 Date 7/31/81 Time 10:45

Name _____ Location: Co. OKANOGAN State WA

Sec. 24 1/4 sec 12 Twp. 30N R. 22E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1520' Quad. COOPER MTN. 7.5'

N 53.95
E 30.75

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12° C

GROUND TEMP. °C _____

AIR TEMP. 25°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM CHANNEL

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SLIGTHLY MM GRANITE

COLOR WHITE

GRAIN SIZE 1-3MM

MEGASCOPIC MINERALS BIOTITE, EPIDOTE, K-SPAR, PLAGIOCLASE, QUARTZ

ALTERATION —

RX TYPE (AT DEPTH) SAME

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING, ORCHARDS

QUALITY OF SAMPLE: EXC., (GOOD) POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W1502G Date 7/31/81 Time 1:45

Name _____ Location: Co OKANOGAN State WA

Sec. 423 sec 10 Twp. 30N R. 22E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2560' Quad. COOPER MTN 7.5'

N 51.65
E 17.3

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11.5°C

GROUND TEMP. °C _____

AIR TEMP. 27°C

ODOR O

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE IN STREAM CHANNEL

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SLIGHTLY MN GRANITE

COLOR WHITE

GRAIN SIZE 1-4MM

MEGASCOPIC MINERALS BIOTITE, QUARTZ, FELDSPAR AND POSSIBLY APATITE OR EPIDOTE

ALTERATION —

RX TYPE (AT DEPTH) SAME AS ABOVE

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK GRAZING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY OKANOGAN N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Phot86 2-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15027 Date 7/31/81 Time 3:15

Name _____ Location: Co OKANOGAN State WA.

N 42.4
E 7.8

Sec. (11) Sec 21 Twp. 30N R. 22E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2400' Quad. COOPER MTN 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C _____

AIR TEMP. 27°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM BED

DISCHARGE 3 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIAL DEPOSITS

COLOR LT. BROWN

GRAIN SIZE FINE → BOULDERS

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) SLIGHT MM GRANITE

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY OKANOGAN N.F.

PREVIOUS AND/OR CURRENT LEASES ?

DG 2-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15020 Date 7/31/81 Time 4:30

Name _____ Location: Co OKANOGAN State WA

Sec. 343 sec 36 Twp. 31N R. 22E ; _____ km/mi _____ OF _____

N 49.45
E 2

Lat. _____ Long. _____ Elevation 1180' Quad. METHOW 7.5'

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C

GROUND TEMP. °C —

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE NEXT TO STREAM BED

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANITE

COLOR LT GRAY

GRAIN SIZE 1mm 4mm

MEGASCOPIC MINERALS QUARTZ, K-SPAR, PLAGIOCLASE, BIOTITE

ALTERATION —

RX TYPE (AT DEPTH) SAME

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING + ORCHARDS

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15029 Date 7/31/81 Time 6:00 PM

Name _____ Location: Co. OKANOGAN State WA

Sec. 23 1/4 SEC 32 Twp. 32N R. 22E ; _____ km/mi _____ OF _____

N 5.25
E 30.25

Lat. _____ Long. _____ Elevation 1440' Quad. METHOW 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C

GROUND TEMP. °C —

AIR TEMP. 26.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN SIDE OF MEADOW

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) _____

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

QUALITY OF SAMPLE: EXC., (GOOD) POOR MAY HAVE TO BE FILTERED

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY GARY MAUGHAN

PREVIOUS AND/OR CURRENT LEASES _____

Photo DG 2-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15030 Date 6/1/81 Time 12:30

Name ALDER SPR also known as SQUAW SPR Location: Co. CHELAN State WA

Sec. 4 & 23 sec 25 Twp. 30N R. 21E ; ^ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5240' Quad. OSS PEAK 7.5'

Sampler D. GRAGG

N 30

E 30.3

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5.5°C DISCHARGE .75 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 15°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM PIPE FROM CEMENT CISTERN ON HILLSIDE

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR LT BROWN

GRAIN SIZE FINE SAND - BOULDER

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

MEGASCOPIC MINERALS _____

ALTERATION _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

RX TYPE (AT DEPTH) 1.

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR LOGGING + GRAZING

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES 2

Photo D62-7+8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15031 Date 8/11/81 Time 1:40

Name Poison Spr Location: Co CHELAN State WA

Sec. 434 Sec 22 Twp. 30N R. 21E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4960' Quad. OSS PEAK 7.5'

Sampler P. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 35.1
E 18.06

DESCRIPTION:

WATER TEMP. °C 16°C Solar

GROUND TEMP. °C _____

AIR TEMP. 16°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM MANY SEEP IN AN OPEN MEADOW

DISCHARGE 30 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLUVIUM

COLOR LT BRN - TAN

GRAIN SIZE FINE SAND → BOULDER

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR CAMPGRD, LIVESTOCK CAMPGROUND, LOGGING, GRAZING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

DG 7 →

DG 6 →

DIDN'T COME OUT
Photo DG 2-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15032 Date 8/6/81 Time 10:00

Name SODA SPRINGS Location: Co. CHELAN State WA

Sec. 411 Sec. 10 Twp. 27N R. 15E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2160' Quad. WENATCHEE LAKE 15'

Sampler DG WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 19.3
E 3.85

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 24°C

ODOR ODORLESS

FLUID COLOR CLOUDY

FLUID TASTE BAD

BUBBLING YES

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM BUBBLES RIGHT OUT OF SOIL NO ROCKS COULD BE SEE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) MARBLE

COLOR GRAY

GRAIN SIZE 3mm

MEGASCOPIC MINERALS CALCITE

ALTERATION _____

RX TYPE (AT DEPTH) SAME AS ABOVE

WATER USED FOR IMMEDIATE AREA USED FOR CAMPGROUND CAMPING, LOGGING. MARBLE QUARRY

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION GROUNDWATER REACTING WITH MARBLE CO_2 RISING TO SURFACE

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES IN SODA SPR CAMPGROUND

Photo DG2-10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15033 Date 8-6-81 Time 2:30 PM

Name Medicine Spring Location: Co. Chelan State WA

Sec. 13 Twp. 26N R. 18E ; 43 km/mi _____ OF _____

N 43.6
E 27.2

Lat. _____ Long. _____ Elevation 5120' Quad. Leavenworth

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C DISCHARGE ~ 1-2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 19°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM soil on hillside. ROCK DATA:

TYPE (SURFACE) Glacial till

COLOR brown/organic-rich.

SALT:

GRAIN SIZE —

MEGASCOPIC MINERALS —

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Gray, porphyritic andesite found in nearby road cuts.

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Not in use at moment.

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O surfacing alongside creek.

PROPERTY OWNED BY Wenatchee Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo → too many trees

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15034 Date 8/6/81 Time 3:45

Name MUD SPRING Location: Co. CHELAN State WA

Sec. 24 & sec. 25 Twp. 26 N R. 18 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4560' Quad. LEAVENWORTH 15'

Sampler WA & DG

N 40.25
E 27.55

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C DISCHARGE / (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 19°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN STREAM CHANNEL ROCK DATA:

TYPE (SURFACE) ANDESITE

COLOR GRAY

SALT: GRAIN SIZE 4mm

TYPE _____ MEGASCOPIC MINERALS PLAGIOCLASE, PYROXENE

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) SAME AS ABOVE

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR NONE LOGGING

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER FROM SURROUNDING HILLS

PROPERTY OWNED BY WENATCHEE

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15035 Date 8/8/81 Time 1:00 PM

Name _____ Location: Co. KITTITAS State WA

Sec. 23 Sec 12 Twp. 20 N R. 17 E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3120' Quad. THORP 15'

N 42.9
E 10.5

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C _____

AIR TEMP. 33°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM CHANNEL DRAINAGE

DISCHARGE 1 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) PEBBLE Cg

COLOR DK GRAY

GRAIN SIZE 1mm → 8mm

MEGASCOPIC MINERALS Qtz, Feldspars.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION _____

RX TYPE (AT DEPTH) Basalt

WATER USED FOR IMMEDIATE AREA USED FOR — Placer and 1 hard Rx mining

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY WENATCHEE N. F.

PREVIOUS AND/OR CURRENT LEASES _____

Photo DG 2-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15036 Date 8/8/81 Time 4:00

Name CARRISON SPR Location: Co. KITTITAS State WA

Sec. 223 sec 28 Twp. 20N R. 18E ; _____ km/mi _____ OF _____

N 34.9
E 19.7

Lat. _____ Long. _____ Elevation 5040' Quad. THORPE 15'

Sampler DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C DISCHARGE 4 gpm gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 25°C DEPTH _____

ODOR COW PISS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN HILLSIDE ROCK DATA:

_____ TYPE (SURFACE) SOIL

_____ COLOR BROWN

SALT: GRAIN SIZE 1-2mm

MEGASCOPIC MINERALS QTZ, FELDSPAR, BIOTITE

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) BASALT

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK GRAZING, LOGGING

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15037 Date 8/6/81 Time 4:45

Name PUMP CHANCE Location: Co. KITTITAS State WA

Sec. 3 1/4 sec 35 Twp. 20N R. 18E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4700' Quad. THORPE 15'

N 31.85
E 25

Sampler DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C DISCHARGE 3 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN HILLSIDE ROCK DATA:

_____ TYPE (SURFACE) SOIL RED-BRN

_____ COLOR RED-BRN

SALT: GRAIN SIZE 1MM - BOULDER

TYPE _____ MEGASCOPIC MINERALS QTZ, FELDSPAR

QUANTITY _____

COLOR _____

FORM _____ ALTERATION -

SINTER: RX TYPE (AT DEPTH) BASALT

TYPE _____ WATER USED FOR LIVESTOCK

QUANTITY _____ IMMEDIATE AREA USED FOR GRAZING

COLOR _____ LOGGING

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE NF

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15038 Date 8/13/81 Time 3:30

Name _____ Location: Co. KITTITAS State WA

Sec. 443 sec 18 Twp. 21N R. 17E ; _____ km/mi _____ OF _____

Lat. 443sec 18 Long. _____ Elevation 4960' Quad. MOUNT STUART 15'

Sampler D. CRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 9.6
E 29.5

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C —

AIR TEMP. 21°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR RED-BRWN

GRAIN SIZE FINE SAND - BOULDER

MEGASCOPIC MINERALS QUARTZ, FELDSPARS

ALTERATION —

RX TYPE (AT DEPTH) BASALT

WATER USED FOR CAMPERS

IMMEDIATE AREA USED FOR HIKING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15039 Date 8/13/81 Time 4:45

Name _____ Location: Co. KITTITAS State WA

Sec. 411 sec 26 Twp. 21N R. 15E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2560' Quad. MOUNT STUART 15'

Sampler D. GRAGG

N 6.4

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

E 8.4

DESCRIPTION:

WATER TEMP. °C 10°C DISCHARGE 4 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 26°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM PIPE IN DRAINAGE OF A LARGE MEADOW

ROCK DATA:

TYPE (SURFACE) SANDSTONE

COLOR TAN

SALT:

GRAIN SIZE MEDIUM

MEGASCOPIC MINERALS QUARTZ, FELDSPAR, BIOTITE

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION NONE

SINTER:

RX TYPE (AT DEPTH) ?

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK FARMING AND RANCHING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

BH 1-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. — Sample No. W 15040 Date 7/22/81 Time 3:00PM

Name Morninglory Mine Location: Co. Ferry State WA.

N 27.2 Sec. 34 Twp. 37N R. 32E ; 334 km/mi OF

E 19.35 Lat. Long. Elevation 2800' Quad. Aeneas

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C DISCHARGE 1 Lpm gpm/Lpm

GROUND TEMP. °C WELL DATA:

AIR TEMP. DEPTH

ODOR Odorless BORE

FLUID COLOR clear PUMP TYPE

FLUID TASTE good STATIC HEAD N/O

BUBBLING no SCALING

BOILING no TYPE OF PIPING

VEGETATION — ARTESIAN HEAD

FLUID ISSUES FROM A mine drainpipe ROCK DATA:

TYPE (SURFACE) Acidic Volcanic w Pyrite mineralization

COLOR Light gray

SALT: GRAIN SIZE

TYPE MEGASCOPIC MINERALS Feldspar(s), Hornblende

QUANTITY N/O Pyrite

COLOR

FORM ALTERATION

SINTER: RX TYPE (AT DEPTH)

TYPE WATER USED FOR IMMEDIATE AREA USED FOR

QUANTITY N/O

COLOR

FORM QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Draining of mine

PROPERTY OWNED BY

PREVIOUS AND/OR CURRENT LEASES Claimed Mining property

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W/E5041 Date 7/22/81 Time 4:30 PM

Name Sheridan Sp. Location: Co. Ferry State WA

Sec. 18 (III) Twp. 37N R. 32 E ; _____ km/mi _____ OF _____

N 37.3
E 19.35

Lat. _____ Long. _____ Elevation 4100 Quad. Aeneas

Sampler Shenker

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7.0 °C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR none

FLUID COLOR clear

FLUID TASTE good

BUBBLING no

BOILING no

VEGETATION abundant

FLUID ISSUES FROM colluvium

DISCHARGE ~2 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) xline volcanic

COLOR light acidic

GRAIN SIZE med - coarse

MEGASCOPIC MINERALS k-spar, horn. qtz.

ALTERATION no

RX TYPE (AT DEPTH) same

SALT:

TYPE _____

QUANTITY NO

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY NO

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR ?

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION seep

PROPERTY OWNED BY USFS

PREVIOUS AND/OR CURRENT LEASES same

BH 1-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15042 Date 7-23-81 Time Noon

Name Gifford fault Spring Location: Co. Stevens State Wash

Sec. 34 Twp. 33N R. 38E ; _____ km/mi _____ OF _____

N
E

Lat. _____ Long. _____ Elevation 2000' Quad. Ams

Sampler Shenher

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C DISCHARGE 30lpm gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR — BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Funky - Iron unlsome STATIC HEAD _____

BUBBLING — SCALING _____

BOILING — TYPE OF PIPING _____

VEGETATION Abunt ARTESIAN HEAD _____

FLUID ISSUES FROM Travertine in fault zone ROCK DATA:

TYPE (SURFACE) Too Much Vegetation

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE $CaCO_3$

QUANTITY A Travertine Abunt

COLOR _____

FORM _____ ALTERATION _____

SINTER: None RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA _____

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: ~~EXC.~~, ~~GOOD~~, POOR

PROBABLE CAUSE OF MANIFESTATION Fault

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES None

BH 1-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15043 Date 7-25-81 Time Noon

Name Hot LAKE Location: Co. OKANOGON State WASH

N 39.6 Sec. 7 and 18 Twp. 40N R. 27E ; _____ km/mi _____ OF _____

E 2.75 Lat. _____ Long. _____ Elevation 850 Quad. OKANOGAN AMS

Sampler Huntsman

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow LAKE

DESCRIPTION:

WATER TEMP. °C 25°C solar Reported to be 50°C - I was told that at the bottom ± the pools its a lot hotter DISCHARGE -0- gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR STRONG Sulphur BORE _____

FLUID COLOR yellow clear PUMP TYPE _____

FLUID TASTE -NO WAY STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION dying due to salt ARTESIAN HEAD _____

FLUID ISSUES FROM Appears to be runoff in a small evaporite basin - no spring could be found ROCK DATA:

TYPE (SURFACE) NV

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE NaCl, etc.

QUANTITY abunt

COLOR white

FORM crusts, growths ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE None WATER USED FOR IMMEDIATE AREA _____

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION Evaporite basin, intersection of two faults

PROPERTY OWNED BY U.S.F.S. road closed

PREVIOUS AND/OR CURRENT LEASES _____

Hot Lake

a bunch of small pools
very soft ground
no telling how deep the pools - no bubbles coming from anywhere

Hot Lake lies at the intersection of ~~two~~ three small faults

BH 1-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15044 Date 7-25-81 Time 5pm

Name Axuse Mtn Spg Location: Co. OKANOGAN State WAST

N 35.8 Sec. 16-32N Twp. 37N R. 29E ; _____ km/mi _____ OF _____

E 8.5 Lat. _____ Long. _____ Elevation 4400 Quad. AENEAS VALLEY

Sampler Huntsman

Sample Type: ~~Spring~~ (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 140c DISCHARGE _____ gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR none BORE _____

FLUID COLOR clear - minor black particles PUMP TYPE _____

FLUID TASTE no taste STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION abundant ARTESIAN HEAD _____

FLUID ISSUES FROM hole in ground - ROCK DATA:

TYPE (SURFACE) Kane terrace

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE none

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Seeps?

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES _____

BH 1-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15045 Date 7/26/81 Time 10Am

Name Brush Creek Spring Location: Co. Ferry State Wash

N 18.55 Sec. 17 132 Twp. 30N R. 33E ; _____ km/mi _____ OF _____

E 7.35 Lat. _____ Long. _____ Elevation 1500 Quad. KELLER 15'

Sampler Huntsman

Sample Type: ~~Spring~~ (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C DISCHARGE 20lpm gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR none BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM Side of Kane Terrace ROCK DATA:

TYPE (SURFACE) Q Alv

COLOR _____

SALT: GRAIN SIZE _____

TYPE Ne MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) _____

TYPE No WATER USED FOR IMMEDIATE AREA USED FOR _____

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Seep

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

BH 1-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15046 Date 7/26/81 Time _____

Name Rebecca LAKE Spring Location: Co. OKANOGAN State WASH

N 10.8 Sec. 33 141 Twp. 29N R. 31E ; _____ km/mi _____ OF _____

E 9.05 Lat. _____ Long. _____ Elevation 2080 Quad. NESPELEM

Sampler Huntsman

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C DISCHARGE 40 lpm gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION Abunt ARTESIAN HEAD _____

FLUID ISSUES FROM Fracture in well weather (rotton) Granite ROCK DATA:

TYPE (SURFACE) rotton granite

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE None.

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) _____

TYPE None WATER USED FOR IMMEDIATE AREA nothing

QUANTITY _____ USED FOR rec

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15047 Date 7/28/81 Time 1pm

Name Mitchel spr Location: Co. Ferry State Wash

N 9.6
E 15.3

Sec. 34 442 Twp. 30N R. 35E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2000 Quad. Wilmont Creek

Sampler Huntsman

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C DISCHARGE 1 lpm gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. — DEPTH _____

ODOR none BORE _____

FLUID COLOR cloudy PUMP TYPE _____

FLUID TASTE none STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION Abunt ARTESIAN HEAD _____

FLUID ISSUES FROM Seep in hillside ROCK DATA:

small hole dug out for cows TYPE (SURFACE) Fill

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE None MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) _____

TYPE None WATER USED FOR Cattle

QUANTITY _____ IMMEDIATE AREA USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION meteoric waters

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES U.S.F.S.

BH 1-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. WI5048 Date 7/28/81 Time 2pm

Name Old Church Spring Location: Co. Ferry State Wash

N 12.6 E 26.95

Sec. 28 along road Twp. 30N R. 36E ; 4111 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1900 Quad. Ams - OKANOGAN Wilmont Creek 15'

Sampler Hanlon

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C DISCHARGE 20 l/pm gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION abundant ARTESIAN HEAD _____

FLUID ISSUES FROM Seep in hillside ROCK DATA:

_____ TYPE (SURFACE) Till

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE none MEGASCOPIC MINERALS _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION none

SINTER: RX TYPE (AT DEPTH) nothing

TYPE none WATER USED FOR IMMEDIATE AREA nothing

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Seep

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

BH-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15049 Date 8-1-81 Time 11:00 AM

Name Poison Lake (Epsom Salts mine) Location: Co. OKAN. State WA

N 11.7 E 5.85

Sec. 5 (422) line Twp. 38N R. 27E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1760' Quad. Oroville 15'

Sampler Huntsman & Shenker

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, (salt), sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 26°C solar? DISCHARGE stagnant gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR foul BORE _____

FLUID COLOR yellowish PUMP TYPE _____

FLUID TASTE didn't taste STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION yes - algae ARTESIAN HEAD _____

FLUID ISSUES FROM ponded water in fault scarp. ROCK DATA:

TYPE (SURFACE) Glacial drift

COLOR _____

SALT: GRAIN SIZE all

MEGASCOPIC MINERALS coral

TYPE Epsom.

QUANTITY abundant

COLOR white

FORM crusts and massive ALTERATION no

SINTER: RX TYPE (AT DEPTH) phyllite

TYPE _____ WATER USED FOR IMMEDIATE AREA cattle?

QUANTITY NO USED FOR epsom salt mine

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION pond in fault, meteoric

PROPERTY OWNED BY private - BLM to N & W ½ sec.

PREVIOUS AND/OR CURRENT LEASES none to knowledge for GT

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15050 Date 8-1-81 Time 11:30 AM

N 12.2

Name Poison Lake Location: Co. OKAN State WA

E 5.8

Sec. 5 (424) line Twp. 38N R. 27E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1760' Quad. Oroville 15'

Sampler Huntsman & Shenker

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow lake

DESCRIPTION:

WATER TEMP. °C 37°C DISCHARGE stag.? gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 27°C DEPTH _____

ODOR unidentified BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE extremely salty STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION no ARTESIAN HEAD _____

FLUID ISSUES FROM lake in ROCK DATA:

TYPE (SURFACE) salt and glacial

COLOR _____

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE epsom -

QUANTITY abund - sat.

COLOR white

FORM xline & dissolved ALTERATION _____

SINTER: RX TYPE (AT DEPTH) phyllite

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR salt works

QUANTITY _____

COLOR NO

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION fault scarp & deep circulation (very salty)

PROPERTY OWNED BY private (salt works)

PREVIOUS AND/OR CURRENT LEASES none known for GT

WA 2-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15051 Date 8-8-81 Time 11:45Am

Name Mineral Spring Location: Co. Kitt. State WA

N 7.0 E 6.25

Sec. 22(343) Twp. 21N R. 17E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2720ft. Quad. Liberty 15'

Sampler Avramenko

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 30°C

ODOR none

FLUID COLOR clear

FLUID TASTE bad

BUBBLING slightly

BOILING no

VEGETATION yes

FLUID ISSUES FROM seep

DISCHARGE stagnant gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) meta & sed.

COLOR gray - tan

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE _____

QUANTITY NO

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM NO

ALTERATION NO

RX TYPE (AT DEPTH) same

WATER USED FOR IMMEDIATE AREA USED FOR none Nat'l. Forest

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION unknown

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES none for G.T.

no photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15052 Date 8-8-81 Time 12:30

Name Durst Spring Location: Co. Kitt. State WA

N 9.4 Sec. 22 (222) Twp. 21 N R. 17 E ; _____ km/mi _____ OF _____

E 8.0 Lat. _____ Long. _____ Elevation 2920 ft. Quad. Liberty 15'

Sampler Avramenko

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 30°C

ODOR none

FLUID COLOR clear

FLUID TASTE good

BUBBLING no

BOILING no

VEGETATION yes

FLUID ISSUES FROM spring in creek bed.

SALT:

TYPE _____

QUANTITY no

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR no

FORM _____

DISCHARGE 10 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) meta & seds / basic dikes

COLOR gray, tan

GRAIN SIZE fine

MEGASCOPIC MINERALS _____

ALTERATION no

RX TYPE (AT DEPTH) same

WATER USED FOR IMMEDIATE AREA USED FOR none Nat'l. Forest

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION rising stream flow

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES none for G.T.

WA 2-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15053 Date 8-8-81 Time 2:00 PM

Name Bonanza Spring Location: Co. Kitt. State WA

N 24.0 Sec. 22 (III) Twp. 22N R. 18E ; _____ km/mi _____ OF _____

E 21.0 Lat. _____ Long. _____ Elevation 4000 ft. Quad. Liberty 15'

Sampler Avramenko

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C DISCHARGE 1 (gpm/Lpm)

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 30°C DEPTH _____

ODOR none BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING no SCALING _____

BOILING no TYPE OF PIPING _____

VEGETATION yes ARTESIAN HEAD _____

FLUID ISSUES FROM pipe in soil ROCK DATA:

TYPE (SURFACE) fine grained xline

COLOR tan

SALT: GRAIN SIZE _____

MEGASCOPIC MINERALS _____

TYPE _____

QUANTITY _____

COLOR NO

FORM _____ ALTERATION NO

SINTER: RX TYPE (AT DEPTH) _____

TYPE _____ WATER USED FOR IMMEDIATE AREA none

QUANTITY _____ USED FOR Nat'l Forest

COLOR NO

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Unknown

PROPERTY OWNED BY U.S.F.S.

PREVIOUS AND/OR CURRENT LEASES none for g.t.

Photo WA 2-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15070 Date 8-16-81 Time 4:45 PM

Name _____ Location: Co. Yakima State WA

Sec. 5 Twp. 16N R. 15E ; 2224 km/mi _____ OF _____

N 16,1 Lat. _____ Long. _____ Elevation 3610' Quad. Manastash Lake

E 9.7 Sampler WA

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C DISCHARGE ~ 2 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 30°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on mountainside. Originally from fractured, porous basalts?

ROCK DATA:

TYPE (SURFACE) CR Basalts

COLOR dk-grey

GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase, olivine.

ALTERATION None visible

RX TYPE (AT DEPTH) Same

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulation of H_2O

PROPERTY OWNED BY Snoqualmie Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15071 Date 8-16-81 Time 5:30 PM

Name _____ Location: Co. Kittitas State WA

N 36.4 Sec. 21 Twp. 17N R. 15E ; 111 km/mi _____ OF _____

E 6.4 Lat. _____ Long. _____ Elevation 5100' Quad. Manastash Lake

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 3.5°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in meadow.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE Nom

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Basalt flows + bx

COLOR med. grey

GRAIN SIZE << 1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None visible

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulation of H2O along bx zones?

PROPERTY OWNED BY Snoqualmie Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES _____

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15072 Date 8-16-81 Time 6:30

Name _____ Location: Co Yakima State WA

Sec. 22 Twp. 16N R. 15E ; 4442 km/mi _____ OF _____

N 49.6
E 23.4

Lat. _____ Long. _____ Elevation 3750' Quad. Nile 15'

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C part (solar) ?

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside. Forms small pond.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep ~ 1 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Basalt

COLOR dk Grey

GRAIN SIZE <1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR Cattle

IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulation of meteoric H2O

PROPERTY OWNED BY Private ?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15073 Date 8-18-81 Time 10:35 AM

Name — Location: Co. Yakima State WA

N 6.2 Sec. 24 Twp. 18N R. 12E ; 1443 km/mi _____ OF _____

E 25.3 Lat. _____ Long. _____ Elevation 4970' Quad. Lester, WA

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, ~~travertine~~, gas, rock, snow

DESCRIPTION: Seep to

WATER TEMP. °C 4°C DISCHARGE ~ 6-10 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 29°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium alongside dry creek channel. ROCK DATA:

TYPE (SURFACE) Tuff

COLOR lt. tan

SALT: ~~GRAIN~~ clast SIZE ≤ 1cm

MEGASCOPIC MINERALS lithics + pumice in ash

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION No

SINTER: RX TYPE (AT DEPTH) Tertiary volcanics; tuff + flow

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR Campers?

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O surfacing alongside creek

PROPERTY OWNED BY Snoqualmie Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

Photo WAZ-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15074 Date 8-18-81 Time 12:10 PM

Name — Location: Co. Yakima State WA

Sec. 4 Twp. 16N R. 11E ; 344 km/mi _____ OF _____

N 26.7
E 7.7

Lat. _____ Long. _____ Elevation 4050' Quad. Bumping Lake

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 29°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM partially blocked mine tunnel.

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

DISCHARGE ~ 1 (gpm)/Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Andesite

COLOR med grey

GRAIN SIZE < 1cm (phenos)

MEGASCOPIC MINERALS plagioclase pyroxene

ALTERATION Silicified + mineralized (cond. flows)

RX TYPE (AT DEPTH) Tertiary volcanics

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulation of H2O ?

PROPERTY OWNED BY Snoqualmie Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15075 Date 8-18-81 Time 5:20 Pm

Name Soda Springs Location: Co. Yakima State WA

N 23.0 Sec. 34 Twp. 17N R. 13E ; 1123 km/mi _____ OF _____

E 11.8 Lat. _____ Long. _____ Elevation 3020' Quad. Old Scab Mtn.

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: (from sample spring)

WATER TEMP. °C 9°C — DISCHARGE ~ 5 gpm/(Lpm)

GROUND TEMP. °C — — WELL DATA: (perhaps ~ 5-7 lpm from both)

AIR TEMP. 31°C — DEPTH _____

ODOR No — BORE _____

FLUID COLOR Slightly cloudy — PUMP TYPE _____

FLUID TASTE Funny — STATIC HEAD _____

BUBBLING Yes — SCALING _____

BOILING No — TYPE OF PIPING _____

VEGETATION Not really. — ARTESIAN HEAD _____

FLUID ISSUES FROM a small cement pit buried in alluvium alongside the river. Bedrock few feet away.

ROCK DATA:

TYPE (SURFACE) Basalt

COLOR dk grey

GRAIN SIZE phenos < 1.5mm

MEGASCOPIC MINERALS plagioclase

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER: An orange scum coats the cement pit and outflow path.

RX TYPE (AT DEPTH) Tertiary volcanics

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR not used

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Circulation of CO_2 charge H_2O along fractures?

PROPERTY OWNED BY Snoqualmie Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15076 Date 8-20-81 Time 11:30

Name Ohanapecosh Hot Springs Location: Co. Lewis State WA

N 42.3 Sec. 4 Twp. 14N R. 10E ; 1241 km/mi _____ OF _____

E 23.0 Lat. _____ Long. _____ Elevation 1920' Quad. Packwood

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 46°C

GROUND TEMP. °C —

AIR TEMP. 17°C

ODOR Yes, slightly sulfurous

FLUID COLOR clear

FLUID TASTE acidic

BUBBLING Yes

BOILING No

VEGETATION Yes

FLUID ISSUES FROM alluvium below road. Orisionally from rock fractures

DISCHARGE Fairly high rate of flow when the several springs are combined. gpm/Lpm

WELL DATA: This one ~ 2-3 gpm

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Tertiary volcanics

COLOR Tuffs and flows

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION A result of greatage

RX TYPE (AT DEPTH) Same / plutonic granite

WATER USED FOR IMMEDIATE AREA USED FOR recreation (park)

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION Deep circulation or magmatic heating

PROPERTY OWNED BY Mt. Ranier Nat. Park

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15077 Date 8-20-81 Time 1:45 PM

Name — Location: Co. Lewis State WA

N 12.8 Sec. 36 Twp. 13N R. 9E ;3241 km/mi _____ OF _____

E 15.4 Lat. _____ Long. _____ Elevation 3400' Quad. Packwood

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C —

AIR TEMP. 19°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM drain pipe buried along roadside. Nearby creek contains only a trickle of H_2O

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~2 (gpm/lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Tertiary andesite flows

COLOR browns + greens

GRAIN SIZE phenos up to 5mm

MEGASCOPIC MINERALS plagioclase

ALTERATION Due to great age

RX TYPE (AT DEPTH) Volcanics

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION meteoric H_2O

PROPERTY OWNED BY Gifford Pinchot National Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo; in forest

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15078 Date 8-20-81 Time 3:45 PM

Name — Location: Co. Lewis State WA

Sec. 25 Twp. 13N R. 9E ; 4433 km/mi _____ OF _____

N 14.5 E 16.2

Lat. _____ Long. _____ Elevation 3520' Quad. Packwood, WA

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C —

AIR TEMP. 20°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM soil and Forest cover. A few "springs" were found at this locality, all cold.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Andesite

COLOR med. grey

GRAIN SIZE < 1cm, phenos.

MEGASCOPIC MINERALS plagioclase, pyroxene

ALTERATION None visible

RX TYPE (AT DEPTH) Tertiary volcanic

WATER USED FOR IMMEDIATE AREA USED FOR No use.

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing in forest

PROPERTY OWNED BY Gifford Pinchot Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 2-20
WA 3-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15079 Date 8-20-81 Time 4:15 PM

Name Soda Springs Location: Co. Lewis State WA

Sec. 6 Twp. 14N R. 11E ;3333 km/mi _____ OF _____

N 36.3 E 2.1

Lat. _____ Long. _____ Elevation 4880' Quad. White Pass, WA

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10° C

GROUND TEMP. °C —

AIR TEMP. 17° C

ODOR No

FLUID COLOR slightly cloudy

FLUID TASTE funny, bubbly

BUBBLING Yes

BOILING No

VEGETATION Green algae

FLUID ISSUES FROM bowl formed from cemented boulders built along creekside. From Fractures in bedrock?

SALT:

TYPE None.

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE orange colored, crumbly $CaCO_3$.

QUANTITY Forms mound

COLOR along side creek,

FORM ~10' high (see photo).

Travertine mound.

DISCHARGE ~5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA: + basaltic andesites

TYPE (SURFACE) platy andesites.

COLOR med grey

GRAIN SIZE < 5mm

MEGASCOPIC MINERALS plagioclase, pyroxene

ALTERATION No o/c in vicinity

RX TYPE (AT DEPTH) Tertiary volcanics

WATER USED FOR IMMEDIATE AREA USED FOR Campground.

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulation of H_2O

PROPERTY OWNED BY Gifford Pinchot Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15080 Date 8-21-81 Time 11:10 AM

N 24.1 Name Indian Spring Location: Co. Yakima State WA

Sec. 10 Twp. 13N R. 12E ; 2222 km/mi _____ OF _____

E 24.1 Lat. _____ Long. _____ Elevation 3910' Quad. White Pass

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 24°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION abundant

FLUID ISSUES FROM soil on mountain side.

DISCHARGE Seep (forms small pond) gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Tuffaceous siltstone & SS / Volcaniclastic sed rocks

COLOR Tan and grey-blue

GRAIN SIZE < 1.5mm

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Volcanic rxs.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Snoqualmie Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15081 Date 8-21-81 Time 1:50 pm

Name — Location: Co. Yakima State WA

Sec. 20 Twp. 13N R. 14E ; 4443 km/mi _____ OF _____

N 43.3 Lat. _____ Long. _____ Elevation 4710' Quad. Foundation Ridge

E 9.2 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C (solar?) DISCHARGE Seep gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 22°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on mountain side. ROCK DATA:

TYPE (SURFACE) Basalts

COLOR dk grey - blk

SALT: GRAIN SIZE < .5mm

TYPE None MEGASCOPIC MINERALS plagioclase, olivine

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None visible

SINTER: RX TYPE (AT DEPTH) Same?

TYPE None WATER USED FOR IMMEDIATE AREA No use

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Nearby creek H2O resurfacing in depression

PROPERTY OWNED BY Snoqualmie Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15082 Date 8-21-81 Time 5:30 PM

Name — Location: Co. Yakima State WA

N 8.4 E 17.3

Sec. 21 Twp. 12N R. 14E ; 2424 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3680' Quad. Foundation Ridge

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ~ 7 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside.

ROCK DATA:

TYPE (SURFACE) Basalt

COLOR blk - dk grey

GRAIN SIZE <C.5mm

MEGASCOPIC MINERALS plagioclase

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Private?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15083 Date 8-23-81 Time ~ 9:40 AM

Name — Location: Co. Yakima State WA

Sec. 16 Twp. 12 N R. 17E ; 4434 km/mi _____ OF _____

N 9.9 Lat. _____ Long. _____ Elevation 1580' Quad. Wiley City

E 17.7 Sampler WA

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 23°C

GROUND TEMP. °C —

AIR TEMP. 24°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM electric pump well.

DISCHARGE High gpm/Lpm

WELL DATA:

DEPTH 327 m ?

BORE ~ 8"

PUMP TYPE Electric

STATIC HEAD —

SCALING minor

TYPE OF PIPING iron ?

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA USED FOR orchard

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulating H2O ?

PROPERTY OWNED BY Yakima Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

N 11.6
E 30.4

Spring No. _____ Sample No. 15084 Date 8-23-81 Time 10:00 AM

Name — Location: Co. Yakima State WA

Sec. 14 Twp. 12N R. 17E ; 4144 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1430' Quad. Wiley City

Sampler WA

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17°C

GROUND TEMP. °C —

AIR TEMP. 26°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM pipe connected to operating electric pump.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE high gpm/Lpm

WELL DATA:

DEPTH ?

BORE ~ 1 foot

PUMP TYPE electric

STATIC HEAD —

SCALING none

TYPE OF PIPING iron

ARTESIAN HEAD —

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA orchard

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulation of meteoric H2O?

PROPERTY OWNED BY Yakima Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15085 Date 8-23-81 Time 1:00 PM

Name — Location: Co. Yakima State WA

N 54.0 Sec. 14 Twp. 13N R. 15E ; 2323 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2840' Quad. Pine Mtn.

E 27.25 Sampler WA

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Seep

WATER TEMP. °C 19°C (part solar?) DISCHARGE ~1-2 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 29°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE o/c STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Grass ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium along roadside. ROCK DATA:

TYPE (SURFACE) Basalt

COLOR dk grey-blk

SALT: GRAIN SIZE <1.5mm

TYPE None MEGASCOPIC MINERALS plagioclase

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) Same

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing?

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

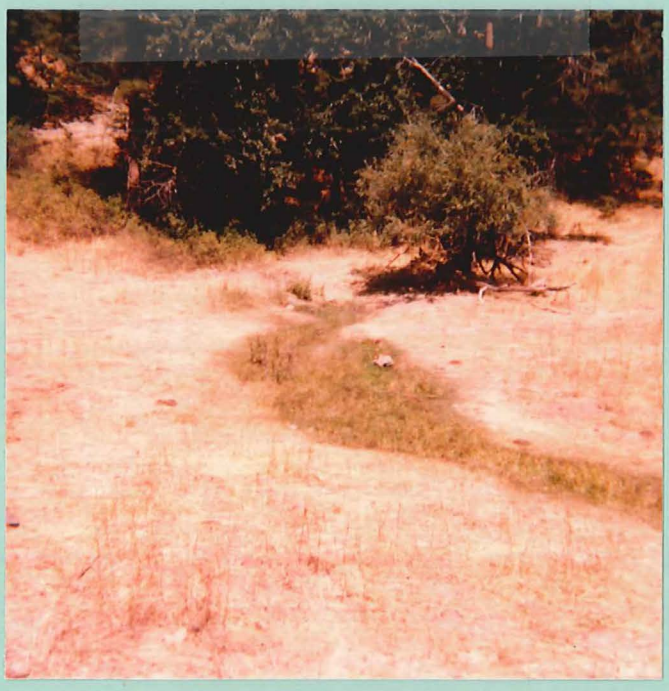


Photo WA3-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15086 Date 8-25-81 Time 11:00AM

Name Bup Spring Location: Co Yakima State WA

N 27.3

Sec. 15 Twp. 8N R. 12E ;2331 km/mi _____ OF _____

E 27.65 Lat. _____ Long. _____ Elevation 2710' Quad. Jungle Butte

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 4°C DISCHARGE ~7 gpm/(lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium along the side of road. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None.

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Basalts

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR Drinking

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing

PROPERTY OWNED BY Yakima Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15087 Date 8-25-81 Time 12:00 PM

N 47.7 Name Soda Spring? Location: Co. Yakima State WA

E 31.7 Sec. 35 Twp. 9N R. 12E ; 2123 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2780' Quad. Jungle Butte

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Sample collected from swampy area where abundant orange scum was found. No real spring was visible

WATER TEMP. °C 15°C (part solar?) DISCHARGE _____ gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 20°C DEPTH _____

ODOR No BORE _____

FLUID COLOR slightly cloudy PUMP TYPE _____

FLUID TASTE Funny STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in creek bed. Not really spring. ROCK DATA:

TYPE (SURFACE) Vesicular Basalts

COLOR dk grey

GRAIN SIZE ≤ .5mm

SALT:

TYPE None MEGASCOPIC MINERALS plagioclase

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None visible

SINTER: RX TYPE (AT DEPTH) Basalts

TYPE None WATER USED FOR IMMEDIATE AREA no use.

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR) needs filtering

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O?

PROPERTY OWNED BY Yakamia Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

No Photo.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15088 Date 8-25-81 Time 2:00 PM

Name McCumber Spring Location: Co. Yakima State WA

Sec. 28 Twp. 7N R. 12E ; 2231 km/mi _____ OF _____

N 32.7 Lat. _____ Long. _____ Elevation 2360' Quad. Glenwood

E 22.3 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C —

AIR TEMP. 20°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM a building which is surrounded by a fence. From alluvium or aquifer in rock?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ High ~ 25 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Vesicular basalts

COLOR dk grey - blk

GRAIN SIZE MEGASCOPIC MINERALS phenos up to 3-4mm plagioclase, olivine

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR Not in use.

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric (Glacial) H2O traveling through aquifer ?

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

No photo: along forested riverbank

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15089 Date 8-25-81 Time 4:15 PM

Name Indian Ford Springs Location: Co. Klickitat State WA

Sec. 4 Twp. 6N R. 13E ; 2231 km/mi _____ OF _____

N 19.4 Lat. _____ Long. _____ Elevation 1040' Quad. Outlet Falls

E 22.5 Sampler WA

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

One of a series of "springs" on the N. side of river.

DESCRIPTION:

WATER TEMP. °C 8.5°C DISCHARGE high gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 23°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on river bank.

ROCK DATA:

TYPE (SURFACE) vesicular Basalts

COLOR dk grey

GRAIN SIZE < 1 mm

MEGASCOPIC MINERALS plagioclase olivine

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Basalts

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O exiting from aquifer?

PROPERTY OWNED BY — Fish hatchery?

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 3-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15090 Date 8-25-8 Time 4:20

N 17.7 Name — Location: Co. Klickitat State WA

E 22.8 Sec. 4 Twp. 6N R. 13E ; 2434 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1010' Quad. Outlet Falls

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: More of this H_2O found near road along fish pond.

WATER TEMP. °C 22°C DISCHARGE ~ 3 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 23°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Funny (alkaline?) STATIC HEAD _____

BUBBLING Yes SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Orange + green algae ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium along riverbank? Number of pipes in area, one of which was ruined by this H_2O, very corrosive. ROCK DATA:

TYPE (SURFACE) Basalts

COLOR blk - dk grey

GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase + olivine

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

white crust covering rocks in area, as well as a "rust".

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Basalts

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H_2O resurfacing?

PROPERTY OWNED BY — Fish hatchery?

PREVIOUS AND/OR CURRENT LEASES —

Photo D6 3-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15091 Date 8/20/81 Time 6:00

Name SODA SPR Location: Co. YAKIMA State WA

Sec. 33 sec 33 Twp. T14N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2760' Quad. TIETON BASIN 7.5'

N 12.25

E 10.1

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 11°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE FUNKY

BUBBLING YES

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE 1 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE >1mm

MEGASCOPIC MINERALS SANIDINE, OLIVINE

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR RECREATION & LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION ?

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DB 3 – 18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15092 Date 8/21/81 Time 10:00

Name _____ Location: Co. YAKIMA State WA

Sec. 33 4 sec 2 Twp. 12N R. 15E ; _____ km/mi _____ OF _____

N 30.1 E 20.75

Lat. _____ Long. _____ Elevation 2440' Quad. PINE MTN. 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE WHICH IS CONTAIN IN CISTERN

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE >1mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE

ALTERATION —

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR DOMESTIC, FARMING, RANCHING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY E.V. GREENWALD

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15093 Date 8/21/81 Time 11:15

Name _____ Location: Co. YAKIMA State WA

Sec. 23 Sec 8 Twp. 12N R. 15E ; _____ km/mi _____ OF _____

N 18.5 E 5.85

Lat. _____ Long. _____ Elevation 2830' Quad. PINE MTN 7.5'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE Slight Soda taste

BUBBLING No

BOILING No

VEGETATION None around pipe

FLUID ISSUES FROM Pipe connected to buried well head.

DISCHARGE 4 gpm/Lpm

WELL DATA:

DEPTH 110'

BORE 3" pvc

PUMP TYPE NONE

STATIC HEAD —

SCALING orange oxide & carbonate

TYPE OF PIPING PVC

ARTESIAN HEAD —

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE >1 mm

MEGASCOPIC MINERALS OLIVINE, PYROXENE, SANIDINE

ALTERATION —

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR NONE

SMALL RANCH

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION PERHAPS TAPS SOME GRD WATER IN MARBLE?

PROPERTY OWNED BY HAL NEW

PREVIOUS AND/OR CURRENT LEASES MR. SCHJOTH

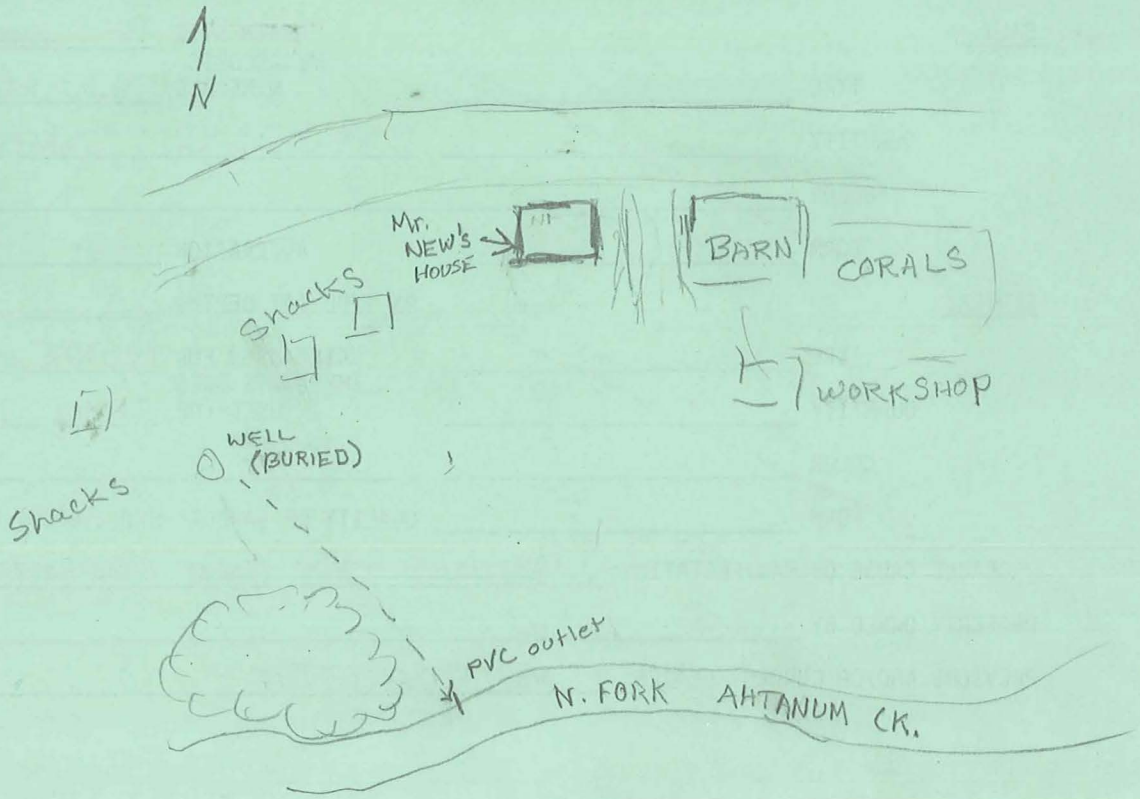

N
Mr. NEW's HOUSE
BARN
CORALS
Shacks
WORKSHOP
WELL (BURIED)
Shacks
PVC outlet
N. FORK AHTANUM CK.

Photo DG 3-20

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15094 Date 8/21/81 Time 1:15

Name _____ Location: Co. YAKIMA State WA

Sec. 12 sec 23 Twp. 12N R. 15E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2360' Quad. PINE MTN 7.5'

N 6.6

E 29.3

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN GROUND

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE <1 mm

MEGASCOPIC MINERALS OLIVINE + SANIDINE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION NONE

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR DOMESTIC SMALL RANCH

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY MR. BUZZ WINTERS

PREVIOUS AND/OR CURRENT LEASES MERLE. ROOT

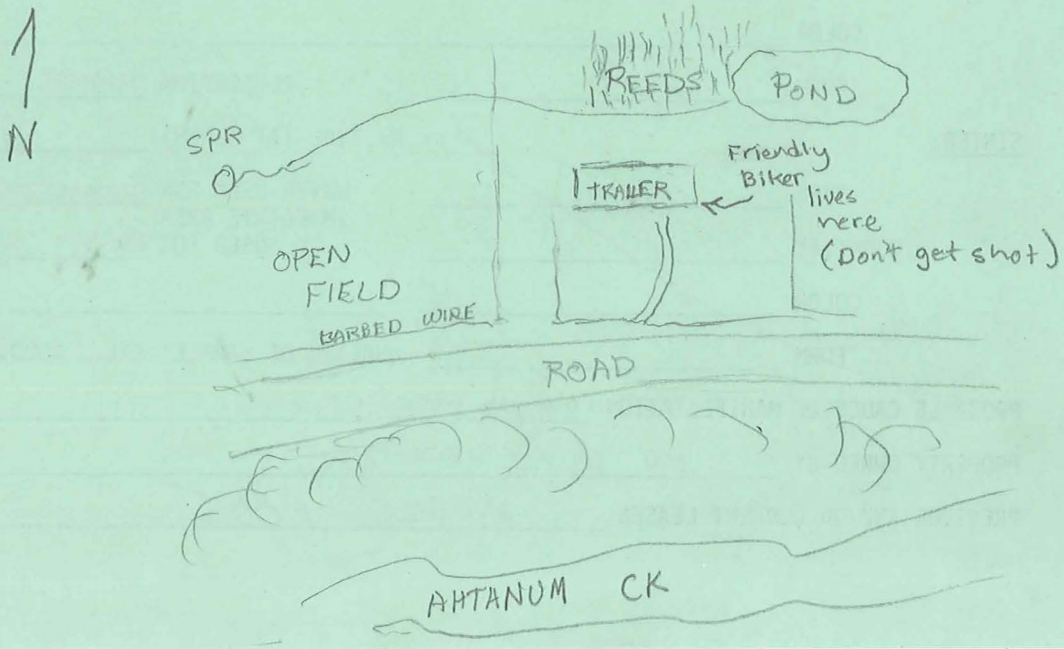

N
REEDS
POND
SPR
TRAILER
Friendly Biker lives here (Don't get shot)
OPEN FIELD
BARBED WIRE
ROAD
AHTANUM CK

Photo DG 4-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15095 Date 8/21/81 Time 2:30

Name _____ Location: Co. YAKIMA State WA.

Sec. 33 1 SEC 17 Twp. 12N R. 16E ; _____ km/mi _____ OF _____

N 13.85 Lat. _____ Long. _____ Elevation 2080' Quad. TAMPICO 7.5'

E 4.5 Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 21°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LTBRN

GRAIN SIZE FINE SAND - BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING, FARMING

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY TOM RIDOUT

PREVIOUS AND/OR CURRENT LEASES ?

Backpack for scale →

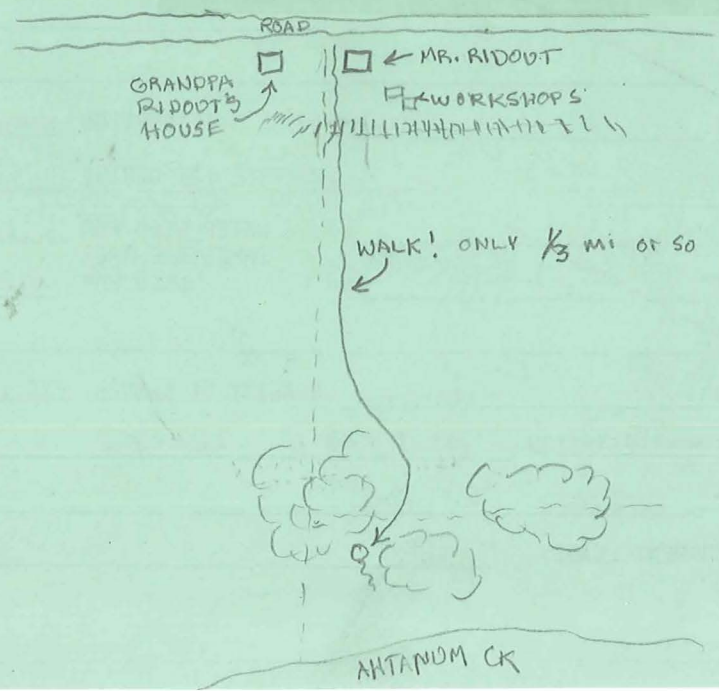


Photo DG 4-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15096 Date 8/21/81 Time 3:30

Name _____ Location: Co. YAKIMA State WA

Sec. CENTER SEC 16 Twp. 12N R. 16E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1940' Quad. TAMPICO 7.5'

N 13.3
E 14.8

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C _____

AIR TEMP. 19.5°C

ODOR STINKS OF ORGANIC

FLUID COLOR DIRTY

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT BRN

GRAIN SIZE FINE SAND - BOULDER

MEGASCOPIC MINERALS QUARTZ - FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK GRAZING, FARMING

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY IKE DRURY

PREVIOUS AND/OR CURRENT LEASES ?

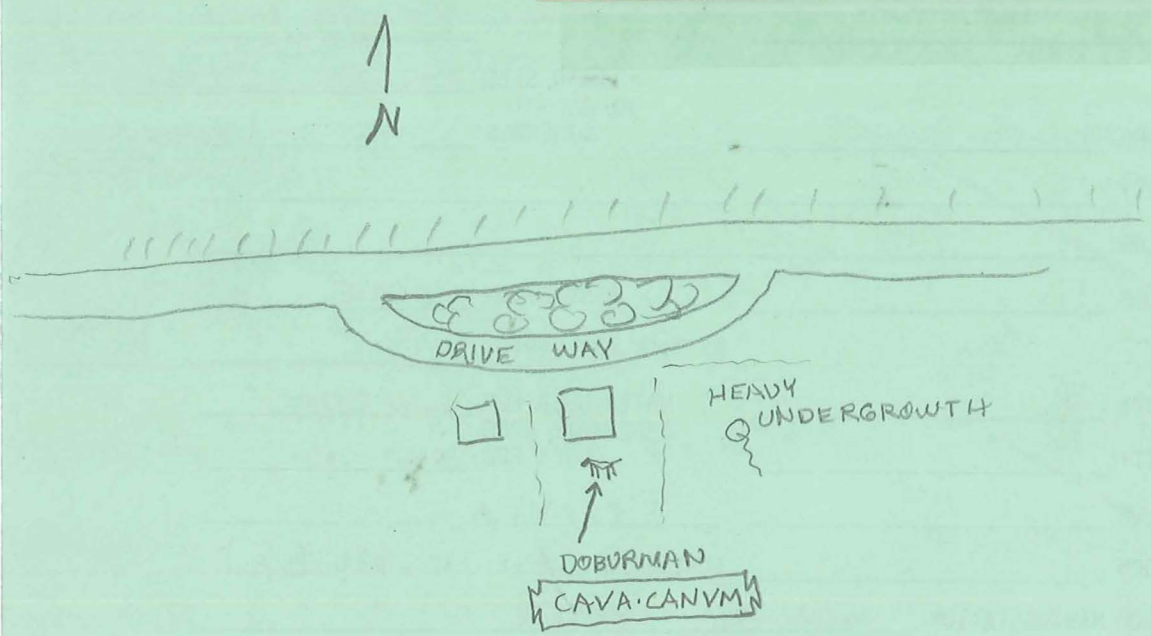

N
DRIVE WAY
HEAVY UNDERGROWTH
DOBERMAN
CAVA·CANVM

Photo DG 4-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15097 Date 8/21/81 Time 4:30

Name _____ Location: Co. YAKIMA State WA

N 14.2
E 33.55

Sec. 34 sec 13 Twp. 12N R. 16E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1720' Quad. TAMPICO 7.5'

Sampler D. GRABB

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C _____

AIR TEMP. 19°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE < 1 mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING, FARMING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY JOHN HERKE

PREVIOUS AND/OR CURRENT LEASES —

Photo DG 4-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15098 Date 8/23/81 Time 12:00

Name BEEK SPRING Location: Co. KLICKITAT State WA

Sec. 21 sec 30 Twp. 6N R. 18E ; _____ km/mi _____ OF _____

N41.35 E17.50

Lat. _____ Long. _____ Elevation 4200' Quad. SATUS PASS 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C _____

AIR TEMP. 21°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) LITHK TUFF

COLOR RED BRN

GRAIN SIZE 2 – 4 MM

MEGASCOPIC MINERALS COLLAPED PUMICE FRAGMENTS

ALTERATION FE OXIDE WX

RX TYPE (AT DEPTH) ?

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING, LOGGING

QUALITY OF SAMPLE: EXC. (GOOD), POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY BOISE CASCADE CO. ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 4-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15099 Date 8/23/81 Time 2:30

Name _____ Location: Co. KLICKITAT State WA

Sec. 32 2 sec 24 Twp. 4N R. 17E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1720' Quad. SATUS PASS 15'

N 12.70
E 16.60

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 17°C (SOLAR) DISCHARGE ? gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 29°C DEPTH _____

ODOR STANK OF ORGANIC BORE _____

FLUID COLOR GREENISH PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN ALLUVIUM ROCK DATA:

FORMING POND ABOUT 15'x20' TYPE (SURFACE) ALLUVIUM

COLOR LT GRAY

SALT: GRAIN SIZE FINE ⇒ MEDIUM SAND & SILT

MEGASCOPIC MINERALS QTZ, FELDSPARS

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) ? BASALT & TUFF

TYPE _____ WATER USED FOR LIVESTOCK

QUANTITY _____ IMMEDIATE AREA USED FOR FARMING

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

Photo DG-4-7
DID NOT COME OUT

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15100 Date 8/25/81 Time 10:30

Name GOVERNMENT MINERAL SPRINGS Location: Co. SKAMANIA State WA

Sec. 32 & sec 25 Twp. 5N R. 6E ; _____ km/mi _____ OF _____

Lat. ? _____ Long. _____ Elevation 1200' Quad. WIND RIVER 15'

N 23.30
E 00.80

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR SLIGHTLY REDDISH

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 2 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR RECREATION

RECREATION

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Did not come out
Photo ~~DG~~ 4-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15101 Date 8/25/81 Time 11:15

Name LITTLE SODA SPRINGS Location: Co. SKAMANIA State WA

Sec. 332 sec 5 Twp. 4N R. 7E ; _____ km/mi _____ OF _____

N 20.65 E 3.20

Lat. _____ Long. _____ Elevation 1120' Quad. WIND RIVER 15'

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C DISCHARGE ? gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 16°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN ALLUVIUM ROCK DATA:

_____ TYPE (SURFACE) ALLUVIUM

_____ COLOR LT GRAY

SALT: GRAIN SIZE _____

TYPE _____ MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION —

SINTER: RX TYPE (AT DEPTH) BASALT

TYPE _____ WATER USED FOR RECREATION

QUANTITY _____ IMMEDIATE AREA USED FOR CAMPING

COLOR _____ LOGGING

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo D6 4-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W1502 Date 8/25/81 Time 2:30

Name _____ Location: Co SKAMANIA State WA

Sec. 31 2 Sec 13 Twp. 4N R. 9E ; _____ km/mi _____ OF _____

N 15.45
E 16.55

Lat. _____ Long. _____ Elevation 3040' Quad. WILLARD 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT RED

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ - FELDSPAR

ALTERATION FE OXIDE

RX TYPE (AT DEPTH) BASALT

WATER USED FOR IMMEDIATE AREA USED FOR NONE / LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. W15103 Sample No. W15103 Date 8/25/81 Time 4:00

Name _____ Location: Co. SKAMANIA State WA

Sec. 14 sec 1 Twp. 5N R. 8E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3200 Quad. WILLARD 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, ~~travertine~~, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM ON HILLSIDE.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE MASSIVE w/ Phenocrysts <1mm

MEGASCOPIC MINERALS OLIVINE, PYROXENE

ALTERATION SOME FE OXIDE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

RECREATION, LOGGING

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15104 Date 8/26/81 Time 11:30

Name _____ Location: Co SKAMANIA State WA

N = 45.35
E = 30.85

Sec. 24 2 sec 15 Twp. 7N R. 10E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3800' Quad. TROUT LAKE 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 3°C

GROUND TEMP. °C _____

AIR TEMP. 16°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT BRN

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT + TUFF

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING, LOGGING

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15105 Date 8/26/81 Time 12:45

Name _____ Location: Co. SKAMANIA State WA

Sec. 143 sec 18 Twp. 7N R. 10E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3240' Quad. TROUT LAKE 7.5'

N=41.85
E=6.35

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 17°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT BROWN

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT

WATER USED FOR IMMEDIATE AREA USED FOR LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 4-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15106 Date 8/26/81 Time 4:00

Name _____ Location: Co SKAMANIA State WA

N 51.60
E 34.65

Sec. 44 Sec 11 Twp. 7N R. 8E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4000' Quad. LONE BUTTE 7.5'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 12°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM WELL

DISCHARGE _____ gpm/Lpm

WELL DATA:

DEPTH ?

BORE 3"

PUMP TYPE _____

STATIC HEAD —

SCALING NONE

TYPE OF PIPING IRON

ARTESIAN HEAD —

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT GRAY

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) BASALTS, ANDESITES

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR CAMPGRD

CAMPGRD

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD - PINCHOT

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15107 Date 8/27/81 Time 10:30

Name ST. MARTINS HOT SPRING Location: Co. SKAMANIA State WA

N 40.4
E 25.5

Sec. 24 & sec 21 Twp. 3N R. 8E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 160' Quad. BONNEVILLE DAM 15'

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 43°C

GROUND TEMP. °C _____

AIR TEMP. 18°C

ODOR STRONG

FLUID COLOR CLEAR

FLUID TASTE FUNKY

BUBBLING —

BOILING —

VEGETATION —

FLUID ISSUES FROM SPRING NOW COVERED BY ST MARTIN'S HOT SPRING RESORT SO ALL WATER PIPED.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ? gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE >1MM

MEGASCOPIC MINERALS Olivine, Sanidine

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR RESORT

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY ST MARTINS HOT SPR RESORT

PREVIOUS AND/OR CURRENT LEASES ?

NOW CALLED BONNEVILLE HOT SPR Photo D6 4-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15108 Date 8/27/81 Time 11:30

Name MOFFETTS HOT SPRINGS Location: Co. SKAMANIA State WA

Sec. 22 1 sec 39 Twp. 2N R. 7E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 80' Quad. BONNEVILLE DAM 15'

Sampler D. GRAGG

NLT. 8
E 5,2

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 32°C

GROUND TEMP. °C _____

AIR TEMP. 18°C

ODOR WEAK

FLUID COLOR CLEAR

FLUID TASTE Slighty funky

BUBBLING NO

BOILING NO

VEGETATION —

FLUID ISSUES FROM PIPE WHICH FLOWS INTO SWIMMING POOL

DISCHARGE 4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE > 1mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE

ALTERATION —

RX TYPE (AT DEPTH) BASALT ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR RESORT

RESORT

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY MOFFETTS HOT SPR RESORT

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15109 Date 8/27/81 Time 3:45

Name — Location: Co SKAMANIA State WA

Sec. 412 sec 27 Twp. 3N R. 7E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 400' Quad. BONNEVILLE DAM 15'

N 39.2
E 9.1

Sampler D. GRAGG

Sample Type: [Spring (with pipe)], well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 29°C

GROUND TEMP. °C _____

AIR TEMP. 19°C

ODOR SLIGHT

FLUID COLOR CLEAR

FLUID TASTE SLIGHT FUNKY

BUBBLING YES

BOILING NO

VEGETATION —

FLUID ISSUES FROM SEEP IN CREEK BED THAT IS COVERED WITH A CONCRET CISTERN

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ? gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) _____

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION _____

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR NONE NOTHING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

PHOTO DG 4-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W151/10 Date 8/29/81 Time 12:00

Name _____ Location: Co. HOOD RIVER State OR.

Sec. 423 SEC 30 Twp. 1N R. 9E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1600' Quad. HOOD RIVER 15'

N 6.9
E 1.05

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 3°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM BENEATH CONCRETE CISTERN

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE HIDDEN BY CISTERN ? gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR BUFF

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT ?

WATER USED FOR —

IMMEDIATE AREA USED FOR —

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo WA 3-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15111 Date 8-24-81 Time 4:50 pm

Name — Location: Co. Kittitas State WA

N 19.1 E 21.15 Sec. 4 Twp. 6N R. 13E ; 2134 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1240' Quad. Outlet Falls

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 22°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR slightly cloudy

FLUID TASTE —

BUBBLING No

BOILING No

VEGETATION Yes, grass

FLUID ISSUES FROM alluvium along river bank.

DISCHARGE several seeps with about 1-2 gpm/(Lpm)

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Basalts

COLOR dk grey

GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None visible

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., GOOD, (POOR) needs Filtering

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O resurfacing?

PROPERTY OWNED BY — Fish hatchery?

PREVIOUS AND/OR CURRENT LEASES —

N. photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15112 Date 8-25-81 Time 6:00 PM

Name — Location: Co. Yakima State WA

Sec. 11 Twp. 7N R. 12E ; 2113 km/mi _____ OF _____

N 52.7 Lat. _____ Long. _____ Elevation 2000' Quad. Glenwood

E 33.1 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7.5°C

GROUND TEMP. °C —

AIR TEMP. 18°C

ODOR No.

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No.

BOILING No.

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 6 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA: Alluvium underlain by

TYPE (SURFACE) Basalts

COLOR dk. grey - blk

GRAIN SIZE << 1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O exiting aquifer in ground

PROPERTY OWNED BY Yakima Indian Reservation ?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15113 Date 8-26-81 Time 11:00 AM

Name Presher Springs Location: Co. Klickitat State WA

Sec. 34 Twp. 6N R. 15E ; 3333 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2690' Quad. Goldendale

N 36.7 Sampler WA

E 9,35 Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: 2 springs combined

WATER TEMP. °C 9°C DISCHARGE ~ 6 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 20°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in small meadow. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) CR Basalts

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O recirculating

PROPERTY OWNED BY — ?

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15114 Date 8-26-81 Time 2:55 PM

Name — Location: Co. Klickitat State WA

Sec. 24 Twp. 4N R. 13E ;1311 km/mi _____ OF _____

N 12.65 Lat. _____ Long. _____ Elevation 480' Quad. Klickitat

Sampler WA

E 14.45 Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Rust colored scum found in abundance here.

DESCRIPTION:

WATER TEMP. °C 15°C DISCHARGE ~ 2-3 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 25°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE slightly funny STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes ARTESIAN HEAD _____

FLUID ISSUES FROM fractures in basalt roadcut, particularly along flow bottom where silicified wood is found. ROCK DATA:

TYPE (SURFACE) Basalt

COLOR black

GRAIN SIZE < 1.5mm

MEGASCOPIC MINERALS plagioclase

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION some opalization

SINTER:

RX TYPE (AT DEPTH) Basalt

TYPE None

WATER USED FOR IMMEDIATE AREA No use

QUANTITY _____

USED FOR _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Shallow circulating water!

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

* Notes on back * Photo WA3-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15115 Date 8-26-81 Time 3:15 Pm

Name Klickitat min. Springs Location: Co. Klickitat State WA

Sec. 24 Twp. 4N R. 13E ; 2414 km/mi _____ OF _____

N 12.5 Lat. _____ Long. _____ Elevation 4080' Quad. Klickitat

E 16.55 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Abundant orange colored scum found.

WATER TEMP. °C 24°C DISCHARGE ~6-7 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 27°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE funny STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION orange algae? ARTESIAN HEAD _____

FLUID ISSUES FROM cement casing behind an old building. ROCK DATA:

TYPE (SURFACE) Basalt

COLOR black

SALT: GRAIN SIZE <<.5mm

MEGASCOPIC MINERALS plag. olivine

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER: RX TYPE (AT DEPTH) basalts

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use at moment.

QUANTITY _____

COLOR _____ Once Mineral Springs spa

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Thermal H2O surfacing.

PROPERTY OWNED BY — ?

PREVIOUS AND/OR CURRENT LEASES -

100 ft north of old building is a well head spouting clear water that has a T of 25°C, is slightly carbonated, slight sulfurous odor, and is surrounded by an orange colored scum. Spouting few gal./min. Other rusty looking areas are visible on the opposing river bank.

Photo WA 3-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15116 Date 8-26-81 Time 3:40 PM

Name Maddock Spring Location: Co. Klickitat State WA

N 13.1 Sec. 19 Twp. 4N R. 14E ; 1214 km/mi _____ OF _____

E 18.0 Lat. _____ Long. _____ Elevation 520' Quad. Klickitat

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Rust-like scum found near by.

DESCRIPTION:

WATER TEMP. °C 21°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Funny

BUBBLING No

BOILING No

VEGETATION Yes

FLUID ISSUES FROM well along roadside

DISCHARGE ~8 (gpm)/Lpm

WELL DATA:

DEPTH 61 m ?

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Vesicular Basalts

COLOR black

GRAIN SIZE << 1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None visible

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA USED FOR No use

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

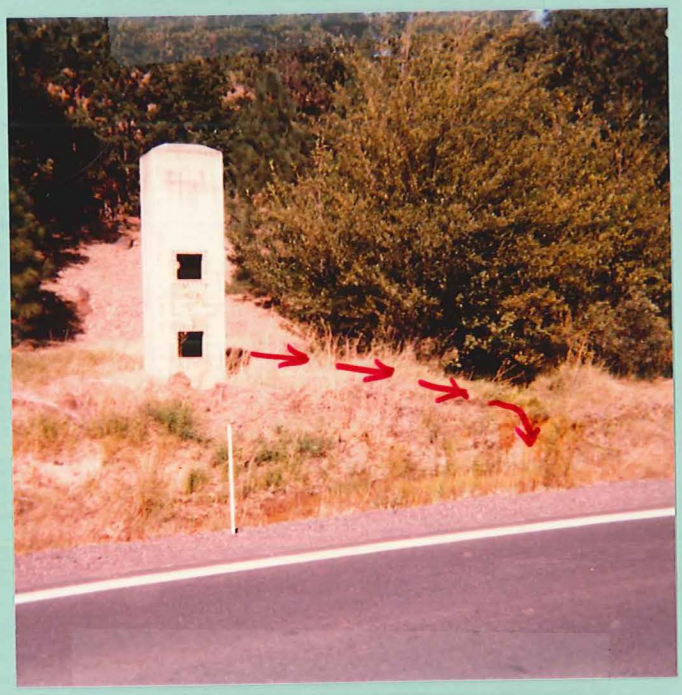
FORM _____

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H_2O surfacing?

PROPERTY OWNED BY — ?

PREVIOUS AND/OR CURRENT LEASES —



* Notes on back*

2 springs, perhaps more.

Photo WA3-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15117 Date 8-26-81 Time 6:00 PM

Name Soda Springs Location: Co. Klickitat State WA

N 25.0 E 16.6

Sec. 25 Twp. 5N R. 13E ; 2434 km/mi — OF _____

Lat. _____ Long. _____ Elevation 720' Quad. Klickitat

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Abundant orange substance in water issuing from spring.

WATER TEMP. °C 16°C DISCHARGE ~4 gpm (Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Unusual, alkaline STATIC HEAD _____

BUBBLING Yes SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Alongside spring, yes, in it only orange algae? ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium that forms river bank. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

SALT:

GRAIN SIZE —

TYPE NaCl ? MEGASCOPIC MINERALS Much of the

QUANTITY Minor; on rocks. soil is orange, some of

COLOR White scum in water.

FORM Forms crust on rocks alongside spring. ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Basalts

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O ?

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Two other rust-colored seeps found about 2/10's of a mile south along this road.

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15118 Date 8-28-81 Time 10:30

Name — Location: Co. Klickitat State WA

Sec. 27 Twp. 5N R. 12E ;4434 km/mi _____ OF _____

N 24.0 Lat. _____ Long. _____ Elevation 2070' Quad. Ithsum

E 27.05 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C DISCHARGE ~ 3-4 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 23°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium at bottom of valley (meadow). ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

SALT:

GRAIN SIZE —

MEGASCOPIC MINERALS _____

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Basalt

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

No photo.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15119 Date 8-28-81 Time 11:00 AM

Name Myting Spring Location: Co. Klickitat State WA

N 27.45 Sec. 20 Twp. 5N R. 13E ; 4214 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2280' Quad. Klickitat

E 6.25 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE Seep gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 23°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside, forming small, shaded pool. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Basalt

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15120 Date 8-29-81 Time 9:45 AM

Name _____ Location: Co. Wasco State Oregon

Sec. 19 Twp. 2N R. 15E ; 4121 km/mi _____ OF _____

N 25.2 Lat. _____ Long. _____ Elevation 440' Quad. Wishram

E 1.85 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13.5°C

GROUND TEMP. °C —

AIR TEMP. 21°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Yes

FLUID ISSUES FROM alluvium at cliffs edge. Originally, perhaps, from breccia zone at base of flow.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) CR Basalt

COLOR black

GRAIN SIZE < .5m

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15121 Date 8-29-81 Time 10:45AM

Name — Location: Co. Wasco State Oregon

N 14.9
E 4.8

Sec. 8 Twp. 1N R. 17E ;4211 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1320' Quad. Wasco

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12.5°C

GROUND TEMP. °C —

AIR TEMP. 19°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in shallow creek channel. No flow in creek

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep, no visible flow gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) CR Basalts

WATER USED FOR IMMEDIATE AREA USED FOR Cattle ?

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15122 Date 8-29-81 Time 11:45 AM

Name — Location: Co. Wasco State Oregon

Sec. 36 Twp. 1N R. 17E ;2113 km/mi _____ OF _____

N 5.7
E 14.5

Lat. _____ Long. _____ Elevation 1480' Quad. Wasco

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 19°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium, flowing into a pond.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~1.5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR brown

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) ER Basalts

WATER USED FOR IMMEDIATE AREA USED FOR Cattle?

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15123 Date 8-29-81 Time 12:30 PM

Name — Location: Co. Wasco State Oregon

Sec. 5 Twp. 3N R. 17E ;2442 km/mi _____ OF _____

N 33.25 E 5.4 Lat. _____ Long. _____ Elevation 840' Quad. Wasco

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside. Originally from flow bx aquifer?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ER Basalts

COLOR black

GRAIN SIZE < .5mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) basalts (some)

WATER USED FOR IMMEDIATE AREA USED FOR Cattle ?

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION meteoric H2O resurfacing

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15124 Date 8-31-81 Time 1:30 PM

Name Summit Spring Location: Co. Skamania State WA

Sec. 28 Twp. 4N R. 5E ; 4322 km/mi _____ OF _____

N 8.35 Lat. _____ Long. _____ Elevation 3080' Quad. Lookout Mtn.

E 7.2 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C DISCHARGE ~ 6 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 19°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside (thickly overgrown) and flows into small pond.

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR No

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Tertiary intermediate volcanics + breccias,

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use.

QUALITY OF SAMPLE: EXC., (GOOD,) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Gifford Pinchot Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15125 Date 8-31-81 Time 2:45 PM

Name — Location: Co. Skamania State WA

N 4.45 Sec. 4 Twp. 3N R. 5E ;2233 km/mi _____ OF _____

E 7.3 Lat. _____ Long. _____ Elevation 1920' Quad. Lookout Mtn.

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C —

AIR TEMP. 22°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Yes, not much.

FLUID ISSUES FROM fractures in rock near the mouth of a tunnel (mine)

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

DISCHARGE ~10 gpm/(Lpm)

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Quartz Monzonite?

COLOR pinkish blue-grey

GRAIN SIZE ~1-3mm

MEGASCOPIC MINERALS plagioclase, K-spar, hornblende

ALTERATION Yes, see back of this sheet.

RX TYPE (AT DEPTH) pluton.

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O circulating along fractures.

PROPERTY OWNED BY Gifford Pinchot Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

Mine tunnel is located in a quartz monzonite pluton (stock?). The rock has been brecciated and then mineralized. Mineralization includes abundant black tourmaline, hornblende, pyrite, chalcopyrite, bornite (?), malachite. Also, few pegmatoid bodies of K-spar + mineralization are visible. Mined for gold or copper?

Appears to follow fault zone?

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15126 Date 9-1-81 Time 12:00 Noon

Name Chambers Lake Spring Location: Co. Lewis State WA

Sec. 2 Twp. 11N R. 10E ; 4132 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4700' Quad. Hamilton Buttes

N 43.1
E 31.6

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Forms stream

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C —

AIR TEMP. 8°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium above the lake.

DISCHARGE ~ 4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA: (+ 1" volcanic ash)

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None + perhaps Quiternary too.

RX TYPE (AT DEPTH) Tertiary volcanics basalt? andesites + andesites

WATER USED FOR IMMEDIATE AREA USED FOR Drinking?

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Gifford Pinchot Nat Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15127 Date 9-1-81 Time 1:00 pm

Name — Location: Co. Yakima State WA

Sec. 19 Twp. 10N R. 11E ;3233 km/mi _____ OF _____

N 39.6
E 2.6

Lat. _____ Long. _____ Elevation 4795' Quad. Glaciate Butte

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 4°C

GROUND TEMP. °C —

AIR TEMP. 6°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on the NE side of Potato Hill, a cinder cone.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium + cinders

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Quaternary basalts.

WATER USED FOR IMMEDIATE AREA USED FOR Drinking

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing

PROPERTY OWNED BY Yakima Indian Reservation

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15128 Date 9-3-81 Time 11:00 AM

Name Longmire Mineral Spring Location: Co. Pierce State WA

Sec. 29 Twp. 15N R. 7E ;4442 km/mi _____ OF _____

Lat. 46° 45' Long. 121° 49' Elevation 2750 Quad. Mt. Rainier

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 21°C

GROUND TEMP. °C —

AIR TEMP. 21°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Unusual

BUBBLING Yes

BOILING No

VEGETATION Nearby

FLUID ISSUES FROM alluvium in meadow.

DISCHARGE Few (<3) gpm/(Lpm)

WELL DATA: Small bubbling pool with no visible surface flow.

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION Accumulation of $CaCO_3$.

RX TYPE (AT DEPTH) Volcanics (Probably Tertiary)

SALT:

TYPE None.

QUANTITY _____

COLOR _____

FORM _____

Slight buildup of travertine around spring Orange-red colored

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Recreation

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulation of H_2O.

PROPERTY OWNED BY Mt. Rainier Nat. Park

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15129 Date 9-3-81 Time 1:30 pm

Name — Location: Co. Pierce State WA

Sec. 27 Twp. 15N R. 6E ; 2221 km/mi _____ OF _____

N 2.4
E 27.6

Lat. _____ Long. _____ Elevation 2120' Quad. Kapowsin

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C

GROUND TEMP. °C —

AIR TEMP. 21°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~1 or less gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Tertiary volcanics + sediments

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15130 Date 9-3-81 Time 4:20 PM

Name — Location: Co. Thurston State WA

Sec. 30 Twp. 16N R. 3E ;2222 km/mi _____ OF _____

N 17.8 E 4.35

Lat. _____ Long. _____ Elevation 400' Quad. Ohop Valley

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 22°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium (gravels) forming fairly large swampy area.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE No visible Flow where sample gpm/Lpm was collected.

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR (gravel)

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Tertiary volcanics?

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing in depression

PROPERTY OWNED BY Private?

PREVIOUS AND/OR CURRENT LEASES —

Photo ~~WA3-15~~
Did not come out.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15131 Date 9-3-81 Time 5:25 PM

Name — Location: Co. Thurston State WA

Sec. 3 Twp. 16N R. 4E ;1423 km/mi _____ OF _____

N 27.1
E 26.1

Lat. _____ Long. _____ Elevation 870' Quad. Ohop Valley

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), (creek), river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 22°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium (silt and gravels) in a pasture. Forms creek

DISCHARGE ~ 10 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION —

RX TYPE (AT DEPTH) Tertiary volcanics?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 31-16
Did not come out

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15132 Date 9-3-81 Time 6:00

Name — Location: Co. Thurston State WA

N 34.6 E 28.7

Sec. 23 Twp. 17N R. 4E ; 1442 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 680' Quad. Ohop Valley

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 20°C

ODOR No

FLUID COLOR Clear (slightly cloudy with silt)

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium above Tanwax Lake

DISCHARGE ~ 1 gpm (Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Tertiary volcanics?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY — Private —

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. — Sample No. 15133 Date 9-5-81 Time 10:35 AM

Name — Location: Co. Kings State WA

Sec. 5 Twp. 19N R. 8E ;3132 km/mi _____ OF _____

N 28.6
E 21.4

Lat. _____ Long. _____ Elevation 1520' Quad. Enumclaw

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6.5°C

GROUND TEMP. °C —

AIR TEMP. 15°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium along roadside.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE High, ~10-15 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None visible

RX TYPE (AT DEPTH) Tertiary volcanics + sediments.

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15134 Date 9-5-81 Time 11:40 AM

Name — Location: Co. Pierce State WA

Sec. 34 Twp. 18N R. 10E ; 2433 km/mi _____ OF _____

N 0.5 E 28.2

Lat. _____ Long. _____ Elevation 2960' Quad. Greenwater

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 24°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in small "creek" channel.

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

DISCHARGE Seepwith <1 lpm gpm/Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by a tuff

COLOR greenish brown

GRAIN SIZE

MEGASCOPIC MINERALS Contains pumice, lithic clasts and few crystals.

ALTERATION A result of its age.

RX TYPE (AT DEPTH) Tertiary volcanics + sods.

WATER USED FOR IMMEDIATE AREA No use.

USED FOR

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY Snoqualmie Nat. Forest

PREVIOUS AND/OR CURRENT LEASES _____

Photo WA3-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. — Sample No. 15135 Date 9-5-81 Time 2:00 PM

Name — Location: Co. Pierce State WA

N 17.4 Sec. 34 Twp. 19N R. 10E ; 2111 km/mi OF

E 28.1 Lat. _____ Long. _____ Elevation 3630' Quad. Greenwater

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Forms small pond.

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 16°C

ODOR No.

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No.

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in depression along the ridge.

DISCHARGE Seep; no gpm/Lpm

WELL DATA: flow visible from where sample was collected. Feeds stream (map)

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by tuffs and platy andesite flows.

COLOR

GRAIN SIZE

MEGASCOPIC MINERALS —

ALTERATION A result of thermal gr.

RX TYPE (AT DEPTH) Tertiary volcanics.

SALT:

TYPE None.

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

WATER USED FOR IMMEDIATE AREA No use

USED FOR

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O collecting in depression.

PROPERTY OWNED BY Snoqualmie Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15136 Date 9-5-81 Time 3:15 PM

Name — Location: Co. Pierce State WA

Sec. 25 Twp. 19N R. 8E ; 243 km/mi _____ OF _____

N 18.9 Lat. _____ Long. _____ Elevation 4320' Quad. Greenwater

E 3.1 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 19°C

ODOR No

FLUID COLOR Clear

FLUID TASTE good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium below the nearby peak.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1 (gpm)/lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by porphyritic andesites and rhyolites.

COLOR lt. grey to pinkish grey

GRAIN SIZE up to 5mm

MEGASCOPIC MINERALS plagioclase, K-spar, pyroxene

ALTERATION No

RX TYPE (AT DEPTH) Tertiary volcanics

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing

PROPERTY OWNED BY Snoqualmie Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15137 Date 9-6-87 Time 11:00 AM

Name — Location: Co. Thurston State WA

Sec. 25 Twp. 17N R. 4E ; 3124 km/mi _____ OF _____

N 31.5 E 1.5

Lat. _____ Long. _____ Elevation 700' Quad. Kapowsin

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 18°C

ODOR No

FLUID COLOR slightly cloudy

FLUID TASTE little funny

BUBBLING No

BOILING No

VEGETATION Abundant + orange brown algae

FLUID ISSUES FROM alluvium alongside road near creek.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS clay pits nearby

ALTERATION None visible

RX TYPE (AT DEPTH) Tertiary volcanics + sediments.

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing.

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15138 Date 9-6-81 Time 4:45

Name Bearhead Mtn. Spring Location: Co. Pierce State WA

Sec. 29 Twp. 18N R. 8E ;242 km/mi _____ OF _____

N 4.0 E 22.95 Lat. _____ Long. _____ Elevation 5720' Quad. Enumclaw

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10° C

GROUND TEMP. °C —

AIR TEMP. 20°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM Alluvium at base of talus slope near peak.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep; ~1 lpm gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Monzonite

COLOR lt pinkish grey

GRAIN SIZE up to 2-3mm

MEGASCOPIC MINERALS plagioclase, K-spar, hornblende, minor quartz(?)

ALTERATION No

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O

PROPERTY OWNED BY Snoqualmie Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

No photo.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15139 Date 9-6-81 Time 4:50 PM

Name — Location: Co. Pierce State WA

N 4.25
E 19.1

Sec. 30 Twp. 18N R. 8E ; 1113 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3600' Quad. Enumclaw

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Appears to be a spring; emerges from clearcut that is covered with thick, brushy growth.

WATER TEMP. °C 9°C DISCHARGE ~2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant. ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in clearcut along roadside. Orange-brown algae covers channel bottom.

ROCK DATA: Alluvium underlain by

TYPE (SURFACE) Granite

COLOR pinkish grey

GRAIN SIZE up to 2-3 mm

MEGASCOPIC MINERALS K-spar, plagioclase (?), hornblende, quartz.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Granite

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing.

PROPERTY OWNED BY Snoqualmie Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Located downhill from mine. See map for more details.

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15140 Date 8/29/81 Time 1:30

Name INDIAN SPRING Location: Co. HOOD RIVER State OR

Sec. 441 sec 21 Twp. 1N R. 8E ; _____ km/mi _____ OF _____

N 10.1 E 21.55 Lat. _____ Long. _____ Elevation 4240' Quad. BONNEVILLE DAM 15'

Sampler D. GRAGO

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 3°C

GROUND TEMP. °C _____

AIR TEMP. 6°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE 1 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) _____

COLOR _____

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT

WATER USED FOR CAMPING

IMMEDIATE AREA USED FOR CAMPGRD

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY MT HOOD N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15141 Date 8/31/81 Time 4:00

Name _____ Location: Co SKAMANIA State WA

Sec. 32 3 sec 21 Twp. 3N R. 5E ; _____ km/mi _____ OF _____

N 40.3 E 6.2

Lat. _____ Long. _____ Elevation 2000' Quad. BRIDAL VEIL 15'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 18°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP NEAR UPPER ADIT OF LAST CHANCE MINE

DISCHARGE 1 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) DIORITE

COLOR GRAY

GRAIN SIZE 1-3 MM

MEGASCOPIC MINERALS PLAGIOCLASE, BIOTITE, HORNBLENDE.

ALTERATION _____

RX TYPE (AT DEPTH) A/A

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR NONE

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT NAT. FOREST

PREVIOUS AND/OR CURRENT LEASES ?

Did not come out
Photo DG 4-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15142 Date 8/31/81 Time 7:00PM

Name _____ Location: Co. CLALK State WA

Sec. 24 sec. 16 Twp. 2N R. 3E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 240' Quad. CAMAS 15'

N 28.45

E 6.8

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C

GROUND TEMP. °C _____

AIR TEMP. 16½°C

ODOR SLIGHT ORGANIC STINK

FLUID COLOR SLIGHTLY GREEN

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP INTO POND

DISCHARGE ? gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT BRWN

GRAIN SIZE SILT - BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR, ASH

ALTERATION —

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK FARMING

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY KENNETH H. MUNGER

PREVIOUS AND/OR CURRENT LEASES L. MUNGER

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15143 Date 9/1/81 Time 11:30

Name _____ Location: Co. LEWIS State WA

Sec. 434 sec. 13 Twp. 12N R. 6E ; _____ km/mi _____ OF _____

N 3.75 E .7

Lat. _____ Long. _____ Elevation 900' Quad. RANDLE 15'

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 12°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

_____

_____

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 6 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE 1>2

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION —

RX TYPE (AT DEPTH) AMA

WATER USED FOR FISH PONDS

IMMEDIATE AREA USED FOR FARMING

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GEORGE LA CHINE

PREVIOUS AND/OR CURRENT LEASES KANNEY DEROSSETT

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15144 Date 9/1/81 Time 1:30

Name _____ Location: Co. LEWIS State WA

Sec. 12 2 sec 25 Twp. 11N R. 7E ; _____ km/mi _____ OF _____

N 18.85 E 2.8

Lat. _____ Long. _____ Elevation 4360' Quad. TOWER ROCK 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 1°C

GROUND TEMP. °C _____

AIR TEMP. 5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM A SEEP IN ALLUVIUM

DISCHARGE _____ / _____ (gpm)/lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE 2-3 mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, LABRADORITE, ZEOLITES

ALTERATION —

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR CAMPING

IMMEDIATE AREA USED FOR RECREATION

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 4-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15145 Date 9/1/81 Time 2:30

Name _____ Location: Co SKAMANIA State WA

Sec. 24 SEC 2 Twp. 10N R. 7E ; _____ km/mi _____ OF _____

N.3
E35.6

Lat. _____ Long. _____ Elevation 4440 Quad. GREENHORN BUTTES

Sampler D. GRABG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE 1-2 mm

MEGASCOPIC MINERALS OLIVINE, PYROXENE, SANIDINE

ALTERATION —

RX TYPE (AT DEPTH) ?.

WATER USED FOR IMMEDIATE AREA USED FOR NONE RECREATION

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY GIFFORD PINCHOT N.F.

PREVIOUS AND/OR CURRENT LEASES ?.

Photo DG 4-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15146 Date 9/2/81 Time 1030

Name _____ Location: Co. LEWIS State WA

N 12 E 25.05

Sec. 123 sec 34 Twp. 13N R. 4E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 960' Quad. MORTON 15'

Sampler D. GRAGG, H. OLSEN

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C _____

AIR TEMP. 14°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM INTO POND

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Qal

COLOR Buff → Lt Yellow

GRAIN SIZE Silt → Boulder

MEGASCOPIC MINERALS Qtz, Feldspars

ALTERATION Mafics mx

RX TYPE (AT DEPTH) BASALT?

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR FARMING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY MR. COLBURN

PREVIOUS AND/OR CURRENT LEASES ?

Photo D64-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15147 Date 9/2/81 Time 11:15

Name MORTON CITY WATER WELL Location: Co. LEWIS State WA

N 11.06
E 24.25

Sec. 424 sec 33 Twp. 13N R. 4E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation ~940' Quad. MORTON 15'

Sampler D. ORAGO, H. OLSEN

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5° DISCHARGE 165 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 15° DEPTH 200'

ODOR Hydrogen Sulphide BORE 3½

FLUID COLOR Clear PUMP TYPE ELECTRIC

FLUID TASTE H OLSEN — GOOD (H OLSEN — SHIT) STATIC HEAD —

BUBBLING NO SCALING NONE COULD BE SEEN

BOILING NO TYPE OF PIPING IRON

VEGETATION — ARTESIAN HEAD —

FLUID ISSUES FROM PUMP — ROCK DATA:

TYPE (SURFACE) VALLEY ALLUVIAL FILL BASALT PORPHYRY ON NEARBY HILL

COLOR BASALT BLACK

SALT:

GRAIN SIZE < 1MM

TYPE _____ MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE.

QUANTITY _____

COLOR _____

FORM _____ ALTERATION —

SINTER:

RX TYPE (AT DEPTH) MORE BASALT?

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR CITY WATER FARMING, SUBURBAN

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION WATER IS NEAR FAULT ZONE POSSIBLE HYDROTHERMAL H2O

PROPERTY OWNED BY MORTON CITY WATER CO.

PREVIOUS AND/OR CURRENT LEASES —

Did not come out

Photo DG4-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15148 Date 9/2/81 Time 1:15

Name _____ Location: Co. LEWIS State WA

Sec. 21 & 25 Twp. 13N R. 4E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1060' Quad. MINERAL 15'

Sampler D. GRAGG, H. OLSEN

N 15.95

E .5

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR NONE

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM BECK MINE

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE MASSIVE

MEGASCOPIC MINERALS OLIVINE, PYROXENE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

SOME LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING INTO MINE

PROPERTY OWNED BY IVY BECK

PREVIOUS AND/OR CURRENT LEASES IVY BECK

Photo DG 4-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15149 Date 9/3/81 Time 2:00

Name PACKWOOD HOT SPR Location: Co. LEWIS State WA

Sec. 23 ~~SW~~ 32 Twp. 13N R. 9E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1000' Quad. PACKWOOD 15'

N 13.05
E 5.15

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 23°C

GROUND TEMP. °C _____

AIR TEMP. 22°C

ODOR STRONG SULPHUR

FLUID COLOR CLEAR

FLUID TASTE FUNKY

BUBBLING NO

BOILING NO

VEGETATION NONE AROUND SPR BUT WHITE HAIR LIKE ALGAE IN SPR

FLUID ISSUES FROM FRACTURE IN RX

SEEMS LIKE FAULT CONTACT?

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ANDESITE PORPHYRY

COLOR GRAY

GRAIN SIZE 3mm → 1m

MEGASCOPIC MINERALS Plagioclase

ALTERATION —

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA NONE

USED FOR LOGGING, FISHING

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION HYDROTHERMAL SOURCE

PROPERTY OWNED BY GIFFORD PINCHOT N.F.?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 4 – 20

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15150 Date 9/5/81 Time 2:00

Name GOLDMEYER HOT SPR Location: Co. KING State WA

Sec. 13 SE 1/4 Twp. 23N R. 11E ; _____ km/mi _____ OF _____

N 41.5
E 13.5

Lat. _____ Long. _____ Elevation 1720' Quad. SNOQUALMIE PASS 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 43°C

GROUND TEMP. °C _____

AIR TEMP. 22°C

ODOR SLIGHT HINT OF S

FLUID COLOR CLEAR

FLUID TASTE SLIGHTLY FUNKY

BUBBLING NO

BOILING NO

VEGETATION —

FLUID ISSUES FROM WHAT APPEARS TO BE A SHOT HOLE IN A SHALLOW ADIT

DISCHARGE 2 (gpm)/lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANODIORITE

COLOR SALT + PEPPER

GRAIN SIZE 1–4 mm

MEGASCOPIC MINERALS QTZ, PLAGIOCLASE, HORNBLENDE, BIOTITE, PYROXENE

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR RECREATION HIKING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

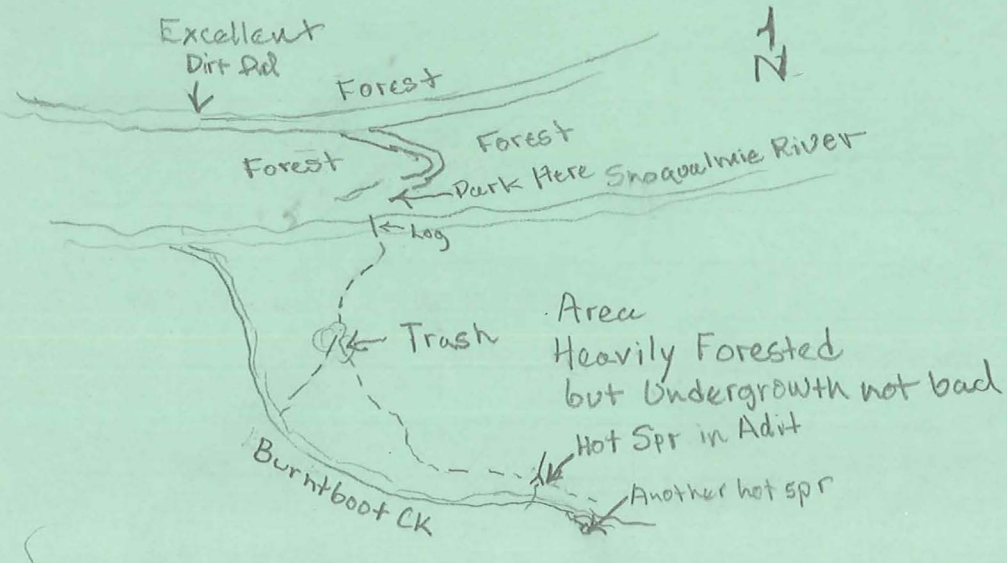
FORM _____

PROBABLE CAUSE OF MANIFESTATION HYDROTHERMAL WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Mine Adit dammed up and ∴ full of hot water



NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. WI5151 Date 9/6/81 Time 11:15

Name _____ Location: Co. KING State WA

Sec. 21 & 29 Twp. 26N R. 11E ; _____ km/mi _____ OF _____

N 40.8 E 24.9 Lat. _____ Long. _____ Elevation 1240' Quad. GROTTO 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR ODORLESS

FLUID COLOR COLORLESS

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR BROWN

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS QTZ, BIOTITE, FELDSPAR

ALTERATION —

RX TYPE (AT DEPTH) GRANODIORITE

WATER USED FOR IMMEDIATE AREA USED FOR NO NONE

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALAMIE N. F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 5 - 2+3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15152 Date 9/6/81 Time 5:45

Name SCENIC HOT SPRING Location: Co. KING State WA

Sec. 21 & Sec 33 Twp. 26N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation ≈4000' Quad. SCENIC 7.5'

N 37.65

E 35.5

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 47°C

GROUND TEMP. °C _____

AIR TEMP. 24°C

ODOR SLIGHT S ODOR

FLUID COLOR CLEAR

FLUID TASTE SLIGHTLY FUNKY

BUBBLING NO

BOILING NO

VEGETATION WHITE ALGAE IN SPR

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 1 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) QTZ MONZONITE PORPHYRY

COLOR WHITE

GRAIN SIZE 1 - 10 mm

MEGASCOPIC MINERALS K-spar, Plagioclase, Biotite, Hornblende, Qtz, Pyroxene

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR RECREATION

IMMEDIATE AREA USED FOR FISHING, HUNTING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION HYDOTHERMAL WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Road takes a major loop here before climbing to Stevens pass

N

1st Dirt Rd east of bridge, unmarked heavy forest cover

about .15mi

To Monroe about 41mi

Scenic

Powerline Rd climbs steep grade in very bad shape Sept. 81

burnt stump

look for trail about at the 3rd transformer tower from parking place

AREA SPRAYED WITH DEFOLIANT

Powerlines

Park Here

area has been clear cut within 1 yr. undergrowth coming back

Dense under growth

steep climbing

Hot Tub w pvc beautiful view (naked winners)

Photo DG5-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15153 Date 9/8/81 Time 1:15

Name _____ Location: Co. KING State WA

N 52.5
E 18.2

Sec. 14 3 sec 8 Twp. 23N R. 7E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2720' Quad. HOBART 7.5'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 23°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO HILLSIDE ALLUVIUM.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SANDSTONE

COLOR DARK GRAY & RED

GRAIN SIZE FINE GRAIN

MEGASCOPIC MINERALS QTZ, FELDSPARS, BIOTITE.

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

LOGGING

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ? WEYERHAUSER

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. N15154 Date 9/8/81 Time 2:00

Name _____ Location: Co. KING State WA

Sec. 434 sec 17 Twp. 23N R. 7E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1700' Quad. HOBART 7.5'

N 44.95
E 20.35

Sampler D. BRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C _____

AIR TEMP. 24°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOP

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SANDSTONE

COLOR BRN

GRAIN SIZE FINE → MEDIUM

MEGASCOPIC MINERALS QTZ, FELDSPAR, BIOTITE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ? W.

PREVIOUS AND/OR CURRENT LEASES ? WEYERHAUSER

No Photo ~~DG 5-5~~

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15155 Date 9/9/81 Time _____

Name COPPERBELL MINE Location: Co. SNOHOMISH State WA

Sec. 21 2 sec 11 Twp. 27N R. 9E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1120' Quad. INDEX 15'

N 17.4

E 16.5

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM ADIT OF THE COPPERBELL MINE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 5 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANODIORITE

COLOR SALT & PEPPER

GRAIN SIZE 1 > 4 mm

MEGASCOPIC MINERALS BIOTITE, QTZ, PLAGIOCLASE, HORNBLENDE, PYROXENE

ALTERATION —

RX TYPE (AT DEPTH) SAME

WATER USED FOR IMMEDIATE AREA USED FOR NONE

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING INTO MINE

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG-5-6 X

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15156 Date 9/10/81 Time _____

Name KROMONA MINE Location: Co. SNOHOMISH State WA

Sec. 441 sec. 13 Twp. 28N R. 9E ; _____ km/mi _____ OF _____

N 29.35
E 18.7

Lat. _____ Long. _____ Elevation 3360' Quad. INDEX 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 23°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION NONE IN MINE

FLUID ISSUES FROM ADIT OF KROMONA MINE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANODIORITE

COLOR SALT + PEPPER

GRAIN SIZE 1 – 3 MM

MEGASCOPIC MINERALS PLAGIOCLASE, QUARTZ, BIOTITE, HORN BLENDE, CHALCOPYRITE, BORNITE

ALTERATION _____

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

NONE

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING INTO MINE

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES _____

NO PHOTO X

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15157 Date 9/10/81 Time _____

Name SPERRY IVERSON MINE Location: Co SNOHOMISH State WA

Sec. 132 sec 24 Twp. 30N R. 9E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1440' Quad. SILVERTON 15'

Sampler D. GRAGG

N 13.25
E 18.75

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE 2 gpm/(Lpm)

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 19°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM ADIT OF SPERRY IVERSON MINE ROCK DATA:

TYPE (SURFACE) GNIESS

COLOR GRAY

SALT: GRAIN SIZE 1 – 4MM

MEGASCOPIC MINERALS QTZ, BIOTITE

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION —

SINTER: RX TYPE (AT DEPTH) ?

TYPE _____ WATER USED FOR NONE

QUANTITY _____ IMMEDIATE AREA USED FOR RECREATION

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING INTO MINE

PROPERTY OWNED BY MT. BAKER N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 5-9
No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15158 Date 9/13/81 Time 3:00

Name MINE WATER Location: Co SNOHOMISH State WA

Sec. 23 & sec 19 Twp. 30N R. 10E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1520' Quad. SILVERTON 15'

N 13.5
E 21.8

Sampler D. CRAIG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 23°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM ADIT OF MINE JUST OUTSIDE SILVERTO

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ½ gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) GRANODIORITE?

COLOR —

GRAIN SIZE 2 - 3 MM

MEGASCOPIC MINERALS SURFACE COVERED BY THICK ALLUVIUM, MINE ADITS CAVED IN; SEEMS QTZ, FELDSPAR, BIOTITE W GALENA, PYRITE, CHALCOPYRITE

ALTERATION FE, OXIDE

RX TYPE (AT DEPTH) _____

WATER USED FOR IMMEDIATE AREA USED FOR NONE VACATION HOMESITES

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER SEEPING INTO MINE

PROPERTY OWNED BY ? NOT ON N.F. PROPERTY

PREVIOUS AND/OR CURRENT LEASES ?

PHOTO DG 5-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15159 Date 9/4/81 Time 2:30

Name BAKER HOT SPR Location: Co. WHATCOM State WA

Sec. 31 33 20 Twp. 38N R. 9E ; _____ km/mi _____ OF _____

N 2.5 Lat. _____ Long. _____ Elevation 1440' Quad. MT SHUKSAN 15'

Sampler D. GRAGG

E 9.45 Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 42°C DISCHARGE 1 gpm/(Lpm)

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 21°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE — STATIC HEAD _____

BUBBLING YES SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION WHITE ALGAE ARTESIAN HEAD _____

FLUID ISSUES FROM GRAVEL POOL BED EXCAVATED IN HILLSIDE ALLUVIUM ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

SALT: GRAIN SIZE MASSIVE

MEGASCOPIC MINERALS PYROXENE

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION OXIDE

SINTER: RX TYPE (AT DEPTH) ?

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR RECREATION LOGGING

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION HYDROTHERAL WATER FROM MT BAKER VC

PROPERTY OWNED BY MT BAKER N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO ×

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15160 Date 9/15/81 Time 11:00

Name _____ Location: Co. SKAGIT State WA

Sec. 32 sec 21 Twp. T36N R. R11E ; _____ km/mi _____ OF _____

N 17.15
E 14.8

Lat. _____ Long. _____ Elevation 560' Quad. MARBLEMOUNT 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C

AIR TEMP. 24°C

ODOR ODORLESS

FLUID COLOR CLEARLESS

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM NEAR MINE

SALT:

TYPE

QUANTITY

COLOR

FORM

SINTER:

TYPE

QUANTITY

COLOR

FORM

DISCHARGE 1 (gpm/Lpm)

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) SCHIST

COLOR GRAY

GRAIN SIZE 2 mm

MEGASCOPIC MINERALS BIOTITE, HORNBLENDE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE / RECREATION

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY PUGET POWER?

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 5-10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15161 Date 9/15/81 Time 4:15

Name _____ Location: Co. SKAGIT State WA

Sec. 23 4 sec 19 Twp. T33N R. 6E ; _____ km/mi _____ OF _____

N 16.8 Lat. _____ Long. _____ Elevation 760' Quad. CLEAR LAKE 15'

E 22.75 Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 21°C SOLAR

GROUND TEMP. °C _____

AIR TEMP. 25°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR GRAY

GRAIN SIZE 1>

MEGASCOPIC MINERALS QTZ

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE / RESEDICAL

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15162 Date 9/16/81 Time 12:00

Name _____ Location: Co. SKAGIT State WA

Sec. 33 sec 34 Twp. T36N R. 4E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 100' Quad. ALGER 7.5

N 27.75
E 27.1

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C _____

AIR TEMP. 20°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN ALLUVIUM

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR GRAY

GRAIN SIZE 1> 15mm

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR FARMING

FARMING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

No Photo
Photo WA1-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15251 Date 8-1-81 Time 1:00 PM

Name — Location: Co. Okanogan State WA

Sec. 9 Twp. 34N R. 22E ; 314 km/mi _____ OF _____

N 36.9 Lat. _____ Long. _____ Elevation 2780' Quad. Twisp

E 18.15 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C —

AIR TEMP. 28°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM muddy soil within the valley.

DISCHARGE Seep over large area coalescing to form stream with ~ 30-40 gpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR black

GRAIN SIZE —

MEGASCOPIC MINERALS —

ALTERATION None

RX TYPE (AT DEPTH) metamorphosed granodiorite?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O surfacing in valley

PROPERTY OWNED BY Private (?)

PREVIOUS AND/OR CURRENT LEASES —

No photo taken; in forest

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15252 Date 8-1-81 Time 2:00 PM

Name — Location: Co. Okanogan State WA

N 38.45 Sec. 10 Twp. 34N R. 22E ; 1111 km/mi _____ OF _____

E 20.3 Lat. _____ Long. _____ Elevation 3750' Quad. Twisp

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8,5°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM muddy alluvium in stream channels

DISCHARGE Seep → to stream; ~30 gpm gpm/Lpm

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Foliated Gneiss

COLOR med grey

GRAIN SIZE up to 5mm

MEGASCOPIC MINERALS K-spar, qtz, hornblende, biotite,

ALTERATION None

RX TYPE (AT DEPTH) Same

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION stream H_2O re-surfacing in creek

PROPERTY OWNED BY Private (?)

PREVIOUS AND/OR CURRENT LEASES —

No Photo
Photo WA1-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15253 Date 8-1-81 Time 2:45 PM

Name — Location: Co. Okanogan State WA

N 21.5 Sec. 10 Twp. 33N R. 22E ; 3143 km/mi _____ OF _____

E 20.7 Lat. _____ Long. _____ Elevation 2320' Quad. Twisp

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

Seep (?) which has collected to form a stagnant pond

WATER TEMP. °C 21°C (Solar) DISCHARGE _____ gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 29°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium within Creek bed. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR brown

SALT:

GRAIN SIZE —

MEGASCOPIC MINERALS —

TYPE None

QUANTITY _____

COLOR _____

FORM _____

Contains blocks of various rock types

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) See 15254

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O surfacing in creek bed(?)

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

No Photo
Photo taken
WA1-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15254 Date 8-1-81 Time 3:20 Pm

Name — Location: Co. Okanogen State WA

N 19.65 Sec. 16 Twp. 33N R. 22E ; 2441 km/mi _____ OF _____

E 20.05 Lat. _____ Long. _____ Elevation 2010' Quad. Twisp

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 29°C

ODOR No

FLUID COLOR Clear

FLUID TASTE O.K

BUBBLING No

BOILING No

VEGETATION Yes, grass

FLUID ISSUES FROM alluvium on hillside, origionally issuing from Fractures?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~2 max gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by grey or purplish grey fine-grained dacite?

COLOR _____

GRAIN SIZE phenos up to 3mm

MEGASCOPIC MINERALS phenos of plag(?) altered to epidote. Occasionally veined with epidote. Pyrite disseminated in rock too.

ALTERATION _____

RX TYPE (AT DEPTH) Some?

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O circulating along fractures?

PROPERTY OWNED BY Private.

PREVIOUS AND/OR CURRENT LEASES —

No Photo
Photo WA1-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15255 Date 8-3-81 Time 9:45

Name Green Spring Location: Co. Okanogan State WA

N 5.5 Sec. 23 Twp. 38N R. 28E ; 1311 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3500' Quad. Oroville

E 26.6 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C (solar?) DISCHARGE Seep forming stagnant pond gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 19°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium at base of cliff. Seeps from bedrock below?

ROCK DATA:

TYPE (SURFACE) Gneiss

COLOR banded, generally grey

GRAIN SIZE ≤ 2mm

MEGASCOPIC MINERALS biotite, K-spar, quartz

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O seeping through bedrock?

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

No Photo
Photo WA1-20

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15256 Date 8-3-81 Time 11:50 AM

Name Wildhorse Spring Location: Co. Okanogan State WA

N 19.85 Sec. 24 Twp. 39N R. 27E ; 4244 km/mi _____ OF _____

E 16.0 Lat. _____ Long. _____ Elevation 3200' Quad. Oroville

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C —

AIR TEMP. 21°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium in creek bed.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1-2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) metamorphosed granite porphyry

COLOR lt. pinkish grey

GRAIN SIZE K-spar - up to 1cm; generally ~ 1-2mm

MEGASCOPIC MINERALS K-spar phenos, quartz, biotite. Mineral show lineation, like gneiss.

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O surfacing in creek bed.

PROPERTY OWNED BY Okanogan Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15257 Date 8-3-81 Time 3:30 PM

Name — Location: Co. Okanogan State WA

N 26.25 Sec. 11 Twp. 39N R. 26 E ; 1133 km/mi _____ OF _____

E 24.9 Lat. _____ Long. _____ Elevation 2080' Quad. Loomis

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 12°C DISCHARGE ~ 1-2 (gpm)/lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 25°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes ARTESIAN HEAD _____

FLUID ISSUES FROM fractured rock within a mine tunnel.

ROCK DATA:

TYPE (SURFACE) Primarily metamorphic rocks (phyllite?)

COLOR blue-grey

GRAIN SIZE —

MEGASCOPIC MINERALS fine grained.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION Mineralized see G-11007 sheet

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

WATER USED FOR IMMEDIATE AREA No use

QUANTITY _____

USED FOR _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O percolating through fractures

PROPERTY OWNED BY Public land (administered by BLM)

PREVIOUS AND/OR CURRENT LEASES —

No Photo
Photo WAZ-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15258 Date 8-4-81 Time 9:45 AM

Name — Location: Co. Okanogan State WA

N 16.65
E 26.75

Sec. 24 Twp. 33N R. 22E ; 4111 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2200' Quad. Twisp

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10.5°C

GROUND TEMP. °C —

AIR TEMP. 24°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Yes

FLUID ISSUES FROM plastic pipe leading into the ground in a small stream channel.

DISCHARGE 7 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Granite

COLOR salt + peper (lt grey)

GRAIN SIZE up to 5mm

MEGASCOPIC MINERALS quartz, microcline, orthoclase, hornblende, biotite.

ALTERATION None

RX TYPE (AT DEPTH) Same

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing in creek bed.

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 2-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15259 Date 8-4-81 Time 1530 PM

Name Seep from Alder Mine Location: Co. Okanogen State _____

N 12.7 Sec. 36 Twp. 33N R. 21E ; 121 km/mi _____ OF _____

E 10.8 Lat. _____ Long. _____ Elevation 3600' Quad. Twisp

Sampler WA

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Seep from mine; from plastic pipe

DESCRIPTION:

WATER TEMP. °C 7.5°C DISCHARGE ~ 15 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE OK STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION None near entrance ARTESIAN HEAD _____

FLUID ISSUES FROM plastic pipe leading into Alder Mine. ROCK DATA: Complex area.

TYPE (SURFACE) Mainly metamorphic rxs. quartzite, phyllites?

COLOR tan to dk green

SALT: GRAIN SIZE variable

TYPE None MEGASCOPIC MINERALS The rock is

QUANTITY _____ very sheared and faulted

COLOR _____ in places.

FORM _____ ALTERATION Very altered. see G11008

SINTER: RX TYPE (AT DEPTH) Semi?

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION H_2O circulating through sheared and faulted rocks.

PROPERTY OWNED BY Okanogan Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15260 Date 8-7-81 Time 2:30 Pm

Name Boiling Spring Location: Co. Chelan State WA

N 10.25
E 23.05

Sec. 27 Twp. 28N R. 18E ;423 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5940' Quad. Silver Falls

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C DISCHARGE ~10 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. ~25°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant (meadow) ARTESIAN HEAD _____

FLUID ISSUES FROM soil in the cirque. Abundant pumice

ROCK DATA:

TYPE (SURFACE) Granite

COLOR lt. grey

GRAIN SIZE ≤ 4mm

MEGASCOPIC MINERALS Quartz, K-spar, biotite, bbl.

SALT:

TYPE None.

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

WATER USED FOR IMMEDIATE AREA Camping area

QUANTITY _____

USED FOR _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing at cirque mouth

PROPERTY OWNED BY Wenatchee Nat Forest

PREVIOUS AND/OR CURRENT LEASES _____

No Photo
Photo WA2-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15261 Date 8-8-81 Time ~9:20

Name — Location: Co. Chelan State WA

Sec. 12 Twp. 22N R. 17E ;1323 km/mi _____ OF _____

N 29.1
E 11.2

Lat. _____ Long. _____ Elevation 2420' Quad. Liberty

Sampler WA + AS

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C —

AIR TEMP. 26°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Roadcut, no (algae)

FLUID ISSUES FROM fractured rock in roadcut

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING Old timer claims lots of Hg found in area.

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Basalt

COLOR Dk. green

GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase, pyroxene, altered olivine (?)

Faults visible in nearby outcrops.

ALTERATION Chloritized

RX TYPE (AT DEPTH) Same?

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION H_2O (meteoric?) circulation in fractured rock

PROPERTY OWNED BY Wenatchee Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 2-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15262 Date 8-13-81 Time 3:30 PM

Name Lankin Spring Location: Co. Kittitas State WA

Sec. 23 Twp. 19N R. 15E ; 1142 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4100' Quad. Cle Elum

N 22.7
E 7.7

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 27°C (solar) DISCHARGE Seep forming stagnant pool. gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. ~30°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Cloudy Green PUMP TYPE _____

FLUID TASTE Ha! STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes, Abundant algae ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside. ROCK DATA:

TYPE (SURFACE) Basaltic andesite

COLOR med. grey

SALT: GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase

TYPE None.

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None

SINTER: RX TYPE (AT DEPTH) Same + tuffaceous breccias

TYPE None WATER USED FOR IMMEDIATE AREA None

QUANTITY _____ USED FOR _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O seep?

PROPERTY OWNED BY Wenatchee Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15263 Date 8-13-81 Time 3:55 PM

Name Skull Spring Location: Co. Kittitas State WA

Sec. 19 Twp. 19N R. 16E ; 123 km/mi _____ OF _____

N 22.9
E 13.2

Lat. _____ Long. _____ Elevation 3560' Quad. Cle Elum

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ~ 8 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 33°C DEPTH _____

ODOR None BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM pipe connected to small well dug in alluvium on hillside

ROCK DATA:

TYPE (SURFACE) Alluvium underlain

COLOR by med. grey basaltic

GRAIN SIZE andesite. < 1mm

MEGASCOPIC MINERALS plagioclase

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Basalts + interbedded volc. seds.

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15264 Date 8-13-81 Time 5:30 PM

Name Tamarack Spring Location: Co. Kittitas State WA

N 11.4 Sec. 12 Twp. 18N R. 15E ; 2442 km/mi _____ OF _____

E 12.5 Lat. _____ Long. _____ Elevation 4640 Quad. Cle Elum

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 14°C

GROUND TEMP. °C —

AIR TEMP. 31°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM pipe leading into locked cement well dug in alluvium.

DISCHARGE Variable, valve controled gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR Med brown

GRAIN SIZE _____

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

RX TYPE (AT DEPTH) Basalts

WATER USED FOR IMMEDIATE AREA USED FOR Camping

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Wenatchee Nat Forest.

PREVIOUS AND/OR CURRENT LEASES —

No Photo; seep over large area in "creek" channel

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15265 Date 8-13-81 Time 6:15 PM

Name Frost Meadow Spring Location: Co. Kittitas State WA

Sec. 9 Twp. 18N R. 15E ; 3333 km/mi _____ OF _____

N 10.0 E 2.35 Lat. _____ Long. _____ Elevation _____ Quad. Cle Elum

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

Seep to stream

WATER TEMP. °C 5°C DISCHARGE ~3 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hill side. Seeps over a fairly large area in what appears to be a channel.

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by volcaniclastic sediments

COLOR Tan

GRAIN SIZE Variable clast

MEGASCOPIC MINERALS size, < 1cm

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same plus basalts

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Wenatchee Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15266 Date 8-14-81 Time 11:20

Name — Location: Co. Kittitas State WA

N 36.5 Sec. 24 Twp. 20N R. 12E ; 3333 km/mi _____ OF _____

E 24.3 Lat. _____ Long. _____ Elevation 3440' Quad. Lester Quad.

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM Soil on hillside.

SALT:

TYPE None

QUANTITY

COLOR

FORM

SINTER:

TYPE None

QUANTITY

COLOR

FORM

DISCHARGE Seep merging into small creek, ~ 4-5 gpm/(Lpm)

WELL DATA:

DEPTH

BORE

PUMP TYPE

STATIC HEAD

SCALING

TYPE OF PIPING

ARTESIAN HEAD

ROCK DATA:

TYPE (SURFACE) Tuff

COLOR olive green

GRAIN SIZE lithics and pumice

MEGASCOPIC ~~MINERALS~~ up to 1 cm

ALTERATION Chloritized

RX TYPE (AT DEPTH) intermediate vol, rocks,

WATER USED FOR IMMEDIATE AREA No use

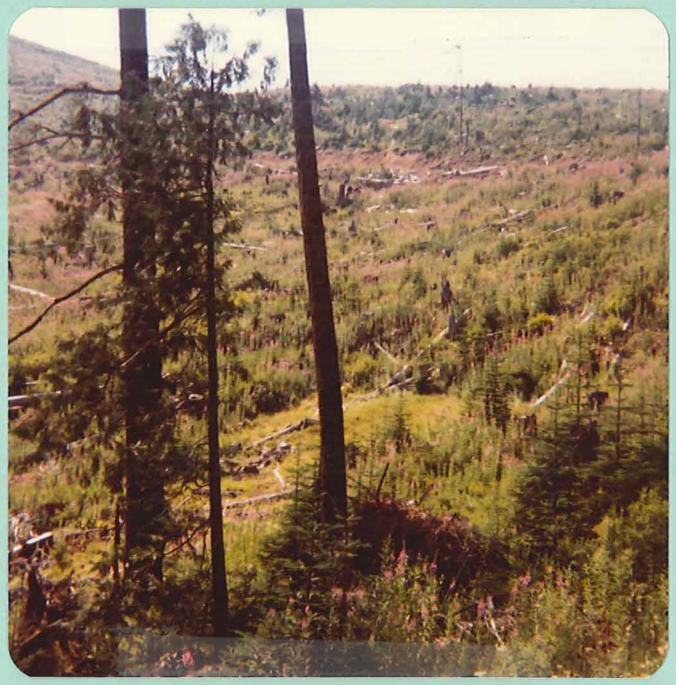
USED FOR

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O surfacing in clearcut

PROPERTY OWNED BY Wenatchee Nat Forest ?

PREVIOUS AND/OR CURRENT LEASES —



No Photo. In clearcut, Identical in appearance to previous springs.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15267 Date 8-14-81 Time 12:25 PM

Name — Location: Co. Kittitas State WA

N 27.7 Sec. 6 Twp. 19N R. 13E ; 4433 km/mi _____ OF _____

E 28.7 Lat. _____ Long. _____ Elevation 4400' Quad. Lester

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C DISCHARGE Seep → ~2-3 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 27°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant grass ARTESIAN HEAD _____

FLUID ISSUES FROM circular patch of soil alongside creek channel. ROCK DATA:

TYPE (SURFACE) Tuffaceous SS.

COLOR tan

GRAIN SIZE _____

MEGASCOPIC MINERALS —

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION Devitrified (Sedi)

SINTER:

RX TYPE (AT DEPTH) Tuffaceous rocks and andesite flows.

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing?

PROPERTY OWNED BY Wenatchee Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15268 Date 8-14-81 Time 2:35 PM

Name Lester Hot Spring Location: Co. King State WA

Sec. 21 Twp. 20N R. 10E ;2333 km/mi _____ OF _____

N 37.0
E 25.7

Lat. _____ Long. _____ Elevation 1520' Quad. Greenwater

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 45°C

GROUND TEMP. °C —

AIR TEMP. _____

ODOR Sulfurous

FLUID COLOR clear

FLUID TASTE Sulfurous

BUBBLING No

BOILING No

VEGETATION Yes, green algae

FLUID ISSUES FROM fracture and bedding planes in rock along side the river

SALT:

TYPE Minor, white

QUANTITY crust or film on

COLOR rock

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 4-5 (gpm)/Lpm

WELL DATA: several (~3-4) small seeps within 50' of each other

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Tuffs and bedded tuffaceous sediments (ss, congl.)

COLOR reddish brown

GRAIN SIZE —

MEGASCOPIC MINERALS clasts + pumice

ALTERATION not really; alteration probably result of greatage.

RX TYPE (AT DEPTH) more intermed. volcanics

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulation of H_2O

PROPERTY OWNED BY Green River Watershed.

PREVIOUS AND/OR CURRENT LEASES Leased.

Photo WA2-12

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15269 Date 8-15-81 Time 10:00 AM

Name Quartz Mtn. Spring. Location: Co. Kittitas State WA

Sec. 3 Twp. 18N R. 14E ;3222 km/mi _____ OF _____

N 13.5
E 20.8

Lat. _____ Long. _____ Elevation 6080' Quad. Easton

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C —

AIR TEMP. 23°C

ODOR No

FLUID COLOR clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM plastic pipe leading into ground near small creek channel.

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 3 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by deformed slate - phyllite

COLOR black

GRAIN SIZE <C .5mm

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Same ?

WATER USED FOR IMMEDIATE AREA USED FOR Camping, picnics.

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Wenatchee Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15271 Date 8-16-81 Time 10:50

Name — Location: Co. Yakima State WA

N 25.8
E 7.5

Sec. 17 Twp. 15N R. 16E ;2342 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3320' Quad. Milk Canyon

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15.5°C DISCHARGE ~ 5-7 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 25°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Veg, grass, trees ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on the hillside. Forms small pond. ROCK DATA:

TYPE (SURFACE) CR basalts

COLOR black

GRAIN SIZE < 1mm

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

MEGASCOPIC MINERALS pyroxene, plagioclase

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Same

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC. (GOOD) POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15272 Date 8-16-81 Time 11:35

Name — Location: Co. Yakima State WA

Sec. 36 Twp. 16N R. 15E ; 3333 km/mi _____ OF _____

N 35.6 Lat. _____ Long. _____ Elevation 3220' Quad. Nile 15' Quad

E 30.3 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9.5°c

GROUND TEMP. °C —

AIR TEMP. 31°c

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside. Originally issuing from fractured basalts?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA: CR

TYPE (SURFACE) Basalt

COLOR black

GRAIN SIZE << 1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing in small creek.

PROPERTY OWNED BY —

PREVIOUS AND/OR CURRENT LEASES —

Photo WAZ-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15273 Date 8-16-81 Time 12:30 PM

Name — Location: Co. Yakima State WA

N 0.2 Sec. 16 Twp. 16N R. 15E ; 3142 km/mi _____ OF _____

E 14.6 Lat. _____ Long. _____ Elevation 2700' Quad. Manastash Lake

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 30°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundent

FLUID ISSUES FROM alluvium on flank of valley. Orijionally From fractured bedrock?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 6 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) CR Basalts

COLOR black

GRAIN SIZE < 1 mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None visible

RX TYPE (AT DEPTH) Same

WATER USED FOR IMMEDIATE AREA USED FOR Cattle

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Circulation (shallow) of H_2O along fractures?

PROPERTY OWNED BY Snoqualmie Nat Forest

PREVIOUS AND/OR CURRENT LEASES —

Photo WA2-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15274 Date 8-16-81 Time 3:50 PM

Name Two Point Spring Location: Co. Kittitas State WA

Sec. 14 Twp. 17N R. 15E ; 4111 km/mi _____ OF _____

N 40.1 E 22.9

Lat. _____ Long. _____ Elevation 5080' Quad. Manastash Lake

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11.5°C

GROUND TEMP. °C —

AIR TEMP. 28°C

ODOR No

FLUID COLOR Clear

FLUID TASTE OK

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM pipe leading into alluvium within the meadow.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~4-5 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) CR Basalts

COLOR black

GRAIN SIZE <1mm

MEGASCOPIC MINERALS plagioclase

ALTERATION None

RX TYPE (AT DEPTH) Same

WATER USED FOR Camping

IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY Snoqualmie N.F.

PREVIOUS AND/OR CURRENT LEASES —

DID NOT COME OUT
DG Z-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15275 Date 8/14/86 Time 11:30

Name _____ Location: Co. KITTITAS State WA

Sec. 442 sec. 1 Twp. 19N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4400' Quad. EASTON 15'

Sampler D. GRAGG

N 29.6
E 17.2

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 22½°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM DRAINAGE CHANNEL

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR LT BRWN

GRAIN SIZE F.SAND - BOULDERS

MEGASCOPIC MINERALS QUARTZ, FELDSPARS, MUSCOVITE, BIOTITE

ALTERATION NONE

RX TYPE (AT DEPTH) SCHIST

WATER USED FOR IMMEDIATE AREA USED FOR NONE

LOGGING, CAMPING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY WENATCHEE N. F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO
TOO MANY
TREES

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. WIS276 Date 8/14/81 Time 1:00

Name _____ Location: Co. KITTITAS State WA

Sec. 32 sec. 31 Twp. 20N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2800' Quad. EASTON 15'

Sampler D. GRAGG

N 33
E 13.3

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 6°C

GROUND TEMP. °C _____

AIR TEMP. 30°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE IN STREAM CHANNEL

DISCHARGE 2 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR LT BROWN

GRAIN SIZE F SAND – BOULDERS

MEGASCOPIC MINERALS BIOTITE, MUSCOVITE, FELDSPARS, QUARTZ

ALTERATION NONE

RX TYPE (AT DEPTH) SCHIST

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR NONE

CAMPING, LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N. F.

PREVIOUS AND/OR CURRENT LEASES 2.

Photo DG 2-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15277 Date 8/14/81 Time 3:15

Name _____ Location: Co. KITTITAS State WA

Sec. 3&4 sec 10 Twp. 19N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4160' Quad. EASTON 15'

Sampler D. GRAGG

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 25.4
E 6.35

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 29°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN DRAINAGE OF HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 4 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SANDSTONE

COLOR LT

GRAIN SIZE MEDIUM

MEGASCOPIC MINERALS QUARTZ, FELDSPARS, MAFIC MINERALS

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR LOGGING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N. F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15278 Date 8/14/81 Time 3:45

Name _____ Location: Co. KITTAS State WA

Sec. 24 2 sec 10 Twp. 19N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3840' Quad. EASTON 15'

Sampler D GRAGG

N 26.75
E 6.5

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 15°C

GROUND TEMP. °C _____

AIR TEMP. 28°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE NEXT TO CREEK

DISCHARGE 1 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) SANDSTONE

COLOR LT

GRAIN SIZE MEDIUM

MEGASCOPIC MINERALS QUARTZ, FELDSPAR, MAFIC MINERALS

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE LOGGING

QUALITY OF SAMPLE: EXC., GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

DID NOT COME OUT
Photo DG 2-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15279 Date 8/14/81 Time 5:45

Name _____ Location: Co. KITTITAS State WA

Sec. 33 sec 29 Twp. T21N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3160' Quad. KACHESS LAKE 15'

Sampler DGRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 6
E 1.3

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN DRAINAGE OF HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 gpm/(lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) WELDED TUFF

COLOR GRAY

GRAIN SIZE 2mm-5mm

MEGASCOPIC MINERALS QUARTZ,

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE

LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N. F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-19

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15780 Date 8/14/81 Time 6:15

Name _____ Location: Co. KITTITAS State WA

Sec. 1/4 sec 29 Twp. T21N R. R13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3180' Quad. KACHESS LAKE 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 5.75
E 1.4

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN DRAINAGE OF HILLSIDE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 gpm (Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) WELDED TUFF

COLOR GRAY

GRAIN SIZE 2mm-8mm

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR NONE / LOGGING

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WENATCHEE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 2-20

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15281 Date 8/16/81 Time 9:45

Name _____ Location: Co. KITTITAS State WA

Sec. 413 sec 15 Twp. 17N R. 17E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2560' Quad. ELLENSBURG 15'

Sampler D. GRAGG

N 37.5

E 5.4

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C

GROUND TEMP. °C _____

AIR TEMP. 26°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO HILLSIDE IN STREAM DRAINAGE

DISCHARGE 1 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE MASSIVE

MEGASCOPIC MINERALS —

ALTERATION NONE

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR WILDLIFE STATE HUNTING AND FISHING AREA

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY L.T MURRAY STATE WILDLIFE RECREATION AREA

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15282 Date 8/16/81 Time 10:30

Name MUD SPRING Location: Co. KITTITAS State WA

Sec. 22 sec 22 Twp. 17N R. 17E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3120' Quad. ELLENSBURG 15'

Sampler D. GRAGG

N 36.45
E 7

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, ~~travertine, gas~~, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C _____

AIR TEMP. 22°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN IN HILLSIDE DRAINAGE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR Lt BROWN

GRAIN SIZE FINE SAND-BOULDER

MEGASCOPIC MINERALS QUARTZ, FELDSPARS

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT

WATER USED FOR IMMEDIATE AREA USED FOR WILDLIFE STATE HUNTING AND FISHING AREA

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY L.T. MURRAY STATE WILDLIFE RECREATION AREA

PREVIOUS AND/OR CURRENT LEASES _____ 2.

Photo DG 3-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W152863 Date 8/16/81 Time 1:00

Name OASIS SPRING Location: Co. KITTITAS State WA

Sec. 443 SEC 20 Twp. 16N R. 18E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3360' Quad. ELLENSBURG 15'

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 18.9

E 17.7

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C _____

AIR TEMP. 22°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO DRAINAGE CHANNEL

DISCHARGE 1/2 gpm/(Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE MASSIVE

MEGASCOPIC MINERALS OLIVINE, SANIDINE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR WILDLIFE PUBLIC HUNTING AND FISHING AREA

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY L.T. MURRAY STATE WILDLIFE RECREATION AREA

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15284 Date 8/16/81 Time 2:45

Name WILLOW SPRING Location: Co. YAKIMA State WA

Sec. 1/4 sec 2 Twp. 15N R. 18E ; _____ km/mi YAKIMA OF _____

Lat. _____ Long. _____ Elevation 2320' Quad. ELLENSBURG 15'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 12.05
E 25.75

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C _____

AIR TEMP. 22°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM CHANNEL

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ? gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) COLLUVIUM

COLOR LT BROWN

GRAIN SIZE FINE SAND - BOULDER

MEGASCOPIC MINERALS _____

ALTERATION NONE

RX TYPE (AT DEPTH) ? BASALT

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

DID NOT COME OUT
Photo ~~06~~ 3-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15285 Date 8/16/81 Time 5:00

Name _____ Location: Co. KITTITAS State WA

Sec. 31 2 sec 20 Twp. 17N R. 16E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3680' Quad. HUDSON CREEK 7.5'

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 35.65
E 2.8

DESCRIPTION:

WATER TEMP. °C 13.5°C

GROUND TEMP. °C _____

AIR TEMP. 17.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN DRAINAGE CHANNEL

DISCHARGE 1/2 gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE >1mm

MEGASCOPIC MINERALS OLIVINE, PYROXENE, SANIDINE

ALTERATION FE OXIDATION

RX TYPE (AT DEPTH) ?

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

QUALITY OF SAMPLE: (EXC.?) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY WA. STATE

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15286 Date 8/16/81 Time 6:00

Name _____ Location: Co. KITTITAS State WA

Sec. 33 1 sec 16 Twp. 17N R. 16E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4160' Quad. HUDSON CREEK 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

N 40.75
E 6.55

DESCRIPTION:

WATER TEMP. °C 12.5°C

GROUND TEMP. °C _____

AIR TEMP. 16.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE —

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN STREAM CHANNEL

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE > 1mm

MEGASCOPIC MINERALS Olivine, Saidline, Pyroxene

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY STATE ?

PREVIOUS AND/OR CURRENT LEASES _____

Photo DG 3-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15287 Date 8/19/81 Time 10:30

Name OAK SPRING Location: Co. YAKIMA State WA

Sec. 443 sec 7 Twp. 9N R. 18E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2640' Quad. HARRAH SE 7.5'

N 10.6
E 2.6

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C _____

AIR TEMP. 19°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE AT THE HEAD OF STREAM CHANNEL

DISCHARGE 2 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) ALLUVIUM

COLOR LT BRN

GRAIN SIZE FINE SAND BOULDERS

MEGASCOPIC MINERALS QTZ, FELDSPAR

ALTERATION NONE

RX TYPE (AT DEPTH) BASALT

WATER USED FOR LIVESTOCK

IMMEDIATE AREA USED FOR GRAZING

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY YAKIMA INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES ?

Photo D6 3-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15288 Date 8/18/81 Time 11:45

Name SEATTLE SPRING Location: Co. YAKIMA State WA

Sec. 23 sec. 20 Twp. 9N R. 17E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3340' Quad. TOPPENISH MTN 7.5'

N 0.2
E 8.1

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. 19°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO HILLSIDE AT THE HEAD OF DRAINAGE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE > 1mm

MEGASCOPIC MINERALS Olivine, SANIDINE, PYROXENE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR LIVESTOCK GRAZING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY YAKIMA INDIAN RESERVATION

PREVIOUS AND/OR CURRENT LEASES 2.

MEANS BUBBLING IN YAKIMA LANGUAGE

Photo D6 3-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W152909 Date 8/18/81 Time 2:00

Name MOOL MOOL SPRING Location: Co. YAKIMA State WA

Sec. 24 2 sec. 20 Twp. 10N R. 16E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1440' Quad. FORT SIMCOE 15'

N 16.25 Sampler D. GRAGG

E 20 Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE 1 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 27°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN ALLUVIUM ROCK DATA:

NEAR CREEK TYPE (SURFACE) ALLUVIUM

COLOR LT BRN

SALT: GRAIN SIZE FINE SAND - BOULDER

MEGASCOPIC MINERALS QTZ, FELDSPAR

TYPE _____

QUANTITY _____

COLOR _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) BASALT ?

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR PARK

QUANTITY _____

COLOR _____ STATE HISTORICAL PARK

FORM _____ QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY FORT SIMCOE HISTORICAL STATE PARK

PREVIOUS AND/OR CURRENT LEASES _____

Spring is just beyond the picnic area, SE corner of the old fort parade ground.

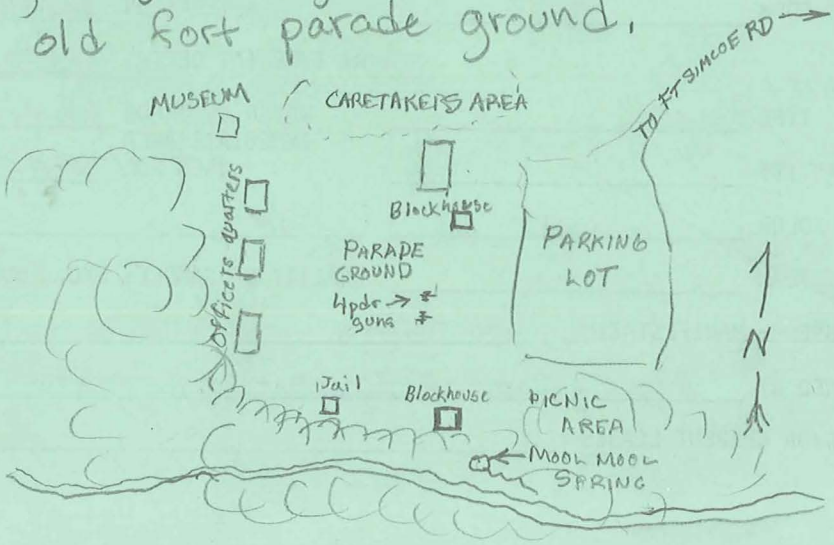


Photo DG 3-9

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15290 Date 8/19/81 Time 10:15

Name _____ Location: Co. YAKIMA State WA

Sec. 24 sec 1 Twp. 16N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2320' Quad. CLIFFDELL 7.5

Sampler D. GRAGG

N 14.8

E 31.6

Sample Type: Spring (with pipe), (well (with pipe)), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C

GROUND TEMP. °C _____

AIR TEMP. _____

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PUMP IN COTTONWOOD CAMPGROUND

DISCHARGE — gpm/Lpm

WELL DATA:

DEPTH ?

BORE ≈ 2½"

PUMP TYPE HAND OPERATED SUCTION TYPE

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE > 1mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR CAMPGROUND CAMPING

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-10

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15291 Date 8/19/81 Time 11:00

Name _____ Location: Co. YAKIMA State WA

Sec. 22 4 sec 22 Twp. 17N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2480' Quad. CLIFFDELL 7.5'

N 33.55
E 18.05

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 4°C

GROUND TEMP. °C _____

AIR TEMP. 15.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE DRAINAGE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE <1mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION —

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR DOMESTIC SUBURBAN

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15292 Date 8/19/81 Time 12:15

Name CEDAR SPRING Location: Co. YAKIMA State WA

Sec. 31 & sec 9 Twp. 17N R. 14E ; _____ km/mi _____ OF _____

N 46.0
E 6.7

Lat. _____ Long. _____ Elevation 2520' Quad. CLIFFDELL 7.5'

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°C DISCHARGE ? gpm/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM SEEP IN HILLSIDE ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

SALT: GRAIN SIZE >1mm

TYPE _____ MEGASCOPIC MINERALS OLIVINE,

QUANTITY _____ PYROXENE, SANIDINE

COLOR _____

FORM _____ ALTERATION NONE

SINTER: RX TYPE (AT DEPTH) ?

TYPE _____ WATER USED FOR IMMEDIATE AREA USED FOR LEASED TO CABIN RESIDENTS

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, (POOR)

PROBABLE CAUSE OF MANIFESTATION METEORIC

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-11

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15293 Date 8/19/81 Time 1:15

Name CEDAR SPRING Location: Co. YAKIMA State WA

Sec. 34 Sec 12 Twp. 17N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2800' Quad. OLD SCAB MTN. 7.5'

N 44.1

E 26.75

Sampler D. GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C

GROUND TEMP. °C _____

AIR TEMP. 21°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT

COLOR BLACK

GRAIN SIZE 2 mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR CAMPING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo ~~06~~ 8-12 DID NOT COME OUT

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W 15294 Date 8/19/81 Time 2:15

Name WILLOW SPRING Location: Co. YAKIMA State WA

Sec. 24 2 sec 12 Twp. 17N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2840' Quad. OLD SCAB MTN. 5'

N 48.5 E 30.65

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8°C DISCHARGE 3 (gpm)/Lpm

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. 23°C DEPTH _____

ODOR ODORLESS BORE _____

FLUID COLOR CLEAR PUMP TYPE _____

FLUID TASTE GOOD STATIC HEAD _____

BUBBLING NO SCALING _____

BOILING NO TYPE OF PIPING _____

VEGETATION ABUNDANT ARTESIAN HEAD _____

FLUID ISSUES FROM RUBBER HOSE IN HILLSIDE SEEP ROCK DATA:

TYPE (SURFACE) TUFF

COLOR BUFF

GRAIN SIZE 1 – 10 mm

MEGASCOPIC MINERALS BIOTITE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION NONE

SINTER:

RX TYPE (AT DEPTH) BASALT ?

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA NONE

USED FOR CAMPING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES _____

Photo DG3-13

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15295 Date 8/19/81 Time 4:15

Name LITTLE BALD MTN SPR Location: Co. YAKIMA State WA

Sec. 1/2 sec 11 Twp. 16N R. 13E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5920' Quad. OLD SCABS MTN 7.5'

Sampler D GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 2°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO HILLSIDE

DISCHARGE 2 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE >2mm

MEGASCOPIC MINERALS PYROXENE, OLIVINE, SANIDINE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR ?

IMMEDIATE AREA USED FOR ?

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-14

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15296 Date 8/20/81 Time 10:15

Name RATTLESNAKE SPRING Location: Co. YAKIMA State WA

N 25.75
E 22.95

Sec. 33 1 cen 11 Twp. 15N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2680' Quad. MEEKS TABLE 7.5'

Sampler D GRAGG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 1°C

GROUND TEMP. °C _____

AIR TEMP. 12.5°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN MEADOW

DISCHARGE 5 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE > 2mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR CAMPGROUND CAMPING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo DG 3-15

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15297 Date 8/10/81 Time 1:00

Name WILLOW SPRING Location: Co. YAKIMA State WA

Sec. 13 sec 15 Twp. 15N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3360' Quad. MEEKS TABLE 7.5'

Sampler D. GRAGG

N 20.20

E 16.45

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 7°C

GROUND TEMP. °C _____

AIR TEMP. 15°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE _____ / _____ (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE >2mm

MEGASCOPIC MINERALS OLIVINE, SANIDINE, PYROXENE

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR ?

LOGGING

QUALITY OF SAMPLE: EXC., (GOOD), POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

Photo D63-16

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. WI5298 Date 8/20/81 Time 2:15

Name _____ Location: Co. YAKIMA State WA

Sec. 443 sec 30 Twp. 15N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 5800' Quad. TIMBERWOLF MTN 7.5'

N 2.95
E 38.75

Sampler D. GRAGG

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 1°C

GROUND TEMP. °C _____

AIR TEMP. 13°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM PIPE DRIVEN INTO HILLSIDE SEEP

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 3 (gpm/Lpm)

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) BASALT PORPHYRY

COLOR BLACK

GRAIN SIZE >2mm

MEGASCOPIC MINERALS PYROXENE, OLIVINE, SANIDINE.

ALTERATION NONE

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA ?

USED FOR ?

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

NO PHOTO

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15299 Date 8/18/81 Time 4:15

Name _____ Location: Co. YAKIMA State WA

Sec. 14 sec 33 Twp. 15N R. 14E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 4240 Quad. MEEKS TABLE 7.5

Sampler D. GRAGG

N .05
E 14.7

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C _____

AIR TEMP. 14°C

ODOR ODORLESS

FLUID COLOR CLEAR

FLUID TASTE GOOD

BUBBLING NO

BOILING NO

VEGETATION ABUNDANT

FLUID ISSUES FROM SEEP IN HILLSIDE

DISCHARGE 2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) WELD TUFF

COLOR BUFF

GRAIN SIZE <4mm

MEGASCOPIC MINERALS BIOTITE

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION NO

RX TYPE (AT DEPTH) ?

WATER USED FOR IMMEDIATE AREA USED FOR LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION METEORIC WATER

PROPERTY OWNED BY SNOQUALAMIE N.F.

PREVIOUS AND/OR CURRENT LEASES ?

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15300 Date 9-8-81 Time 1:10 pm

Name — Location: Co. King State WA

Sec. 35 Twp. 22N R. 7E ; 3141 km/mi _____ OF _____

N 45.4 E 35.8

Lat. _____ Long. _____ Elevation 960' Quad. Cumberland

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11°C

GROUND TEMP. °C —

AIR TEMP. 25°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

DISCHARGE ~10 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on hillside. Originally from collapsed coal mine? No visible coal found nearby.

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Tertiary volcanics + sediments?

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing from aquifer

PROPERTY OWNED BY Private?

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15301 Date 9-8-81 Time 4:00 PM

N 46.0 Name — Location: Co. King State WA

Sec. 36 Twp. 22N R. 6E ; 4123 km/mi _____ OF _____

E 6.1 Lat. _____ Long. _____ Elevation 680' Quad. Cumberland

Sampler WA

Sample Type: Spring (with pipe), well (with pipe), (creek), river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 16°C (part solar?) DISCHARGE ~ 6 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in depression and flows N. No one spring found, therefore stream at outlet was sampled. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Tertiary sediments ss + shales

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Photo WA3-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15302 Date 9-9-81 Time 11:45 AM

Name Sunset Mine Spring Location: Co. Snohomish State WA

N 49.7 Sec. 1 Twp. 27N R. 10E ; 2341 km/mi _____ OF _____

E 11.7 Lat. _____ Long. _____ Elevation 1405' Quad. Baring, WA

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

* Notes about mine on back *

DESCRIPTION:

WATER TEMP. °C 6.5°C DISCHARGE ~ 25 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 16°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION No ARTESIAN HEAD _____

FLUID ISSUES FROM Sunset Mine (tunnel) and then flows underground. Strong, cold breeze comes out of tunnel.

ROCK DATA:

TYPE (SURFACE) Granite

COLOR lt. grey

GRAIN SIZE ~ 2-3 mm

MEGASCOPIC MINERALS quartz, K-spar, biotite, hornblende

ALTERATION mineralized (see back)

RX TYPE (AT DEPTH) Same?

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O flowing into tunnel.

PROPERTY OWNED BY Snoqualmie Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

Sunset Mine

Host rock is a lt. grey granite. Mineralization consists of fairly abundant disseminated chalcopyrite and pyrite, along with some bornite. Cu-sulfides weathers to malachite, tinting the rock to pale green. Some quartz veins present in samples found in dump. Appears to have been mined early 1900's.

Photos WA3-19
WA3/1/12D

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15303 Date 9-9-81 Time 3:30 PM

Name Garland Mineral Springs Location: Co. Snohomish State WA

N 6.6
E 10.4

Sec. 25 Twp. 28N R. 11E ; 123 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1560' Quad. Blanca Lake

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

* Notes on back *

DESCRIPTION:

WATER TEMP. °C 20°C

GROUND TEMP. °C —

AIR TEMP. 19°C

ODOR No

FLUID COLOR Slightly cloudy

FLUID TASTE Alkaline

BUBBLING Yes

BOILING No

VEGETATION Yes (along banks)

FLUID ISSUES FROM alluvium at the base of the slope.

SALT: Some $CaCO_3$ being deposited on rocks + vegetation.

TYPE _____

QUANTITY As crusts

COLOR orange

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~30 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Granite

COLOR lt. grey

GRAIN SIZE ~ 1-2 mm

MEGASCOPIC MINERALS k-spar, quartz, biotite + hornblende

ALTERATION None visible

RX TYPE (AT DEPTH) Pluton?

WATER USED FOR IMMEDIATE AREA USED FOR Mineral baths

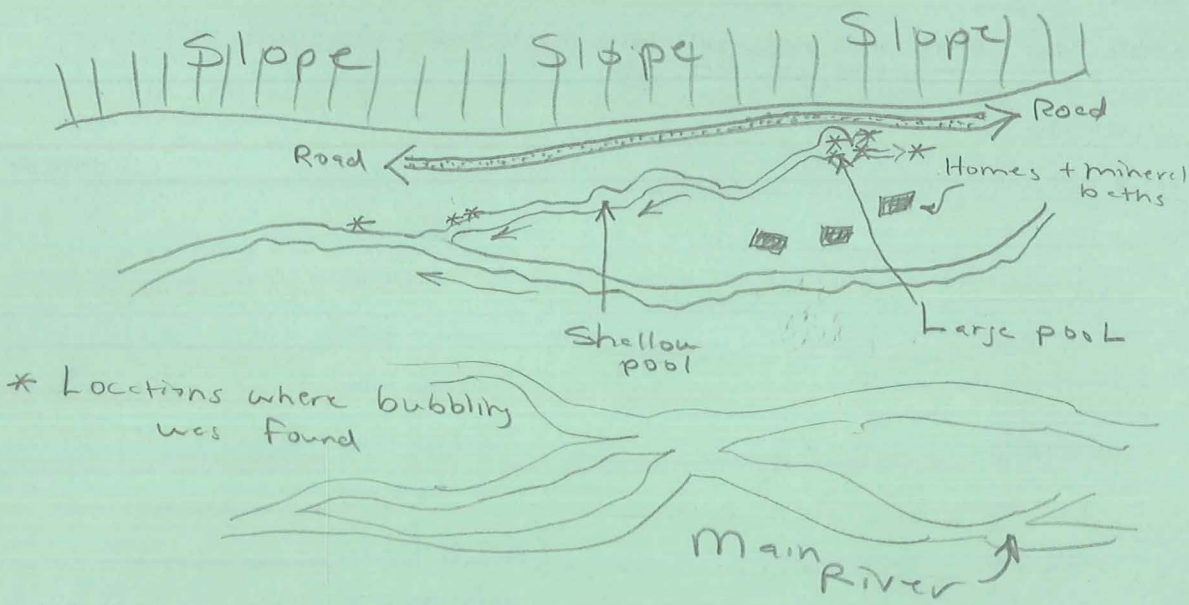
QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Carbonated H_2O rising along Fault?

PROPERTY OWNED BY Private?

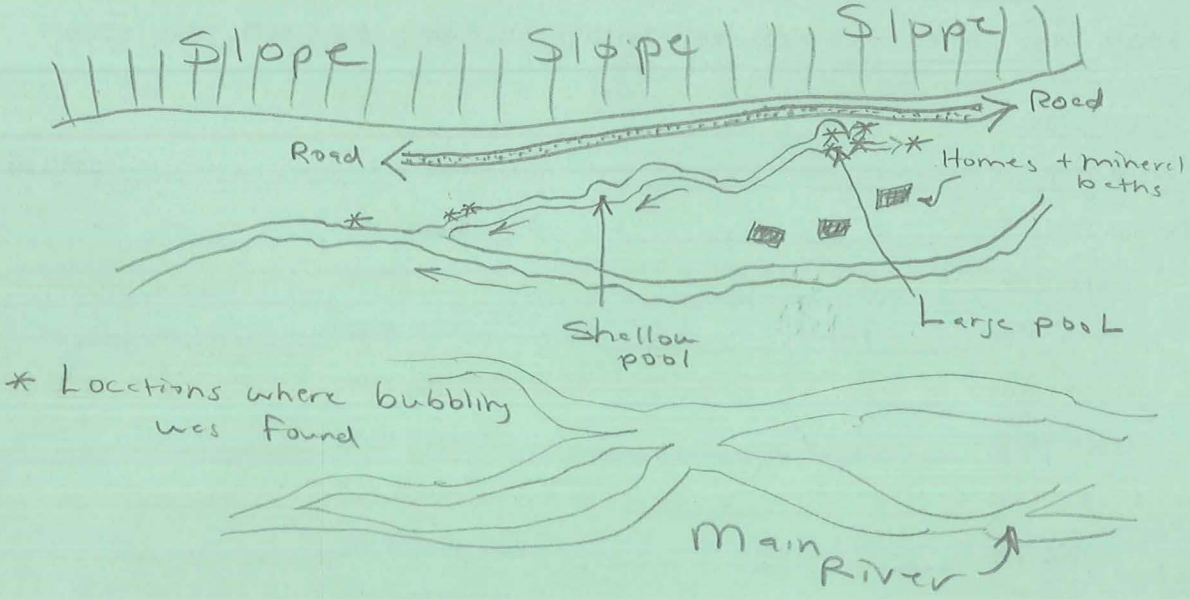
PREVIOUS AND/OR CURRENT LEASES —

Bubbling mineral water issues from several localities along the northern floor of the valley, at base of slope.



Abundant orange algae found, along with some deposition of $CaCO_3$. Spoke with someone there. Claims that ~80°F but cooled ou oad. Also said th soda water issuing prings on slope.

Bubbling mineral water issues from several localities along the northern floor of the valley, at base of slope.



Abundant orange algae found, along with some deposition of $CaCO_3$. Spoke with someone there. Claims that the mineral H2O was hotter, ~ 80° F but cooled over the years. Blames the road. Also said there was a spring of clear soda water issuing from spring above other springs on slope.

No photo.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15304 Date 9-10-81 Time 11:40 AM

Name — Location: Co. Snohomish State WA

N 23.8 Sec. 29 Twp. 30N R. 11E ;3334 km/mi _____ OF _____

E 22.3 Lat. _____ Long. _____ Elevation 1950' Quad. Bedal

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

Seep? Difficult to determine since it mixes with river water.

WATER TEMP. °C	10.5°C	DISCHARGE	gpm/Lpm
GROUND TEMP. °C	—	WELL DATA:	Probably mixes with R. H_2O.
AIR TEMP.	15°C	DEPTH	
ODOR	No	BORE	
FLUID COLOR	clear	PUMP TYPE	
FLUID TASTE	Alkaline	STATIC HEAD	
BUBBLING	None Found	SCALING	
BOILING	No	TYPE OF PIPING	
VEGETATION	Yes	ARTESIAN HEAD	

FLUID ISSUES FROM river gravels alongside South Fork River. Appears to issue from several localities in this valley

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

Abundant orange scum (algae + Fe?) found in some of the streams.

ALTERATION None Visible

SINTER:

RX TYPE (AT DEPTH) _____

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR _____

QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H_2O

PROPERTY OWNED BY Mt. Baker Nat Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo; in forest.

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15305 Date 9-10-81 Time 2:45 PM

Name Sloan Creek Camp Spring Location: Co. Snohomish State WA

N 26.2
E 28.7

Sec. 29 Twp. 30N R. 12E ; 4223 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2100' Quad. Sloan Peak

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10.5°C DISCHARGE ~ 1-2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 21°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Alkaline STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Yes (alongside). ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium in forest. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

Abundant orange scum found in channel of spring.

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) _____

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating water that has surfaced.

PROPERTY OWNED BY Mt. Baker National Forest.

PREVIOUS AND/OR CURRENT LEASES —

No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15306 Date 9-10-81 Time 3:10 PM

Name Ruby Creek Spring Location: Co. Snohomish State WA

Sec. 20 Twp. 30N R. 12E ; 1141 km/mi _____ OF _____

N 35.8 E 23.9

Lat. _____ Long. _____ Elevation 2006 Quad. Sloan Peak

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Appears as though this valley contains several mineral springs, many not found or visible.

WATER TEMP. °C 12°C DISCHARGE ~ 4 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 21°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Alkaline STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Orange algae ARTESIAN HEAD _____

FLUID ISSUES FROM gravel Found in creek channel. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

SALT: GRAIN SIZE —

MEGASCOPIC MINERALS _____

TYPE None

QUANTITY _____

COLOR _____

FORM _____ ALTERATION None (stained orange)

SINTER: RX TYPE (AT DEPTH) Metamorphics (schists)

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: EXC., GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O sustaining

PROPERTY OWNED BY Mt. Baker Nat Forest,

PREVIOUS AND/OR CURRENT LEASES —

Photo DG 5- 7+8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15307 Date 9-12-81 Time 1:00 PM

Name Kennedy Hot Spring 1 Location: Co. Snohomish State WA

Sec. 1 Twp. 30N R. 12E ; 142 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3300' Quad. Glacier Peak

N 21.1
E 6.7

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 35°C

GROUND TEMP. °C —

AIR TEMP. ~25°C

ODOR No

FLUID COLOR slightly cloudy

FLUID TASTE alkaline

BUBBLING Yes

BOILING No

VEGETATION No (orange algae)

FLUID ISSUES FROM fractures in bedrock

DISCHARGE ~2 (gpm)/lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) metamorphics (schists + gneiss)

COLOR on one bank,

GRAIN SIZE tuffs on other.

MEGASCOPIC MINERALS _____

ALTERATION Stained orange

RX TYPE (AT DEPTH) Metamorphics

SALT:

TYPE No

QUANTITY _____

COLOR _____

FORM _____

Travertine mound (orange) built up where it enters the river.

SINTER:

TYPE No

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR recreation

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H_2O

PROPERTY OWNED BY Glacier Peak Wilderness

PREVIOUS AND/OR CURRENT LEASES —

Other mineral springs found where Kennedy Creek + White Chuck River intersect.

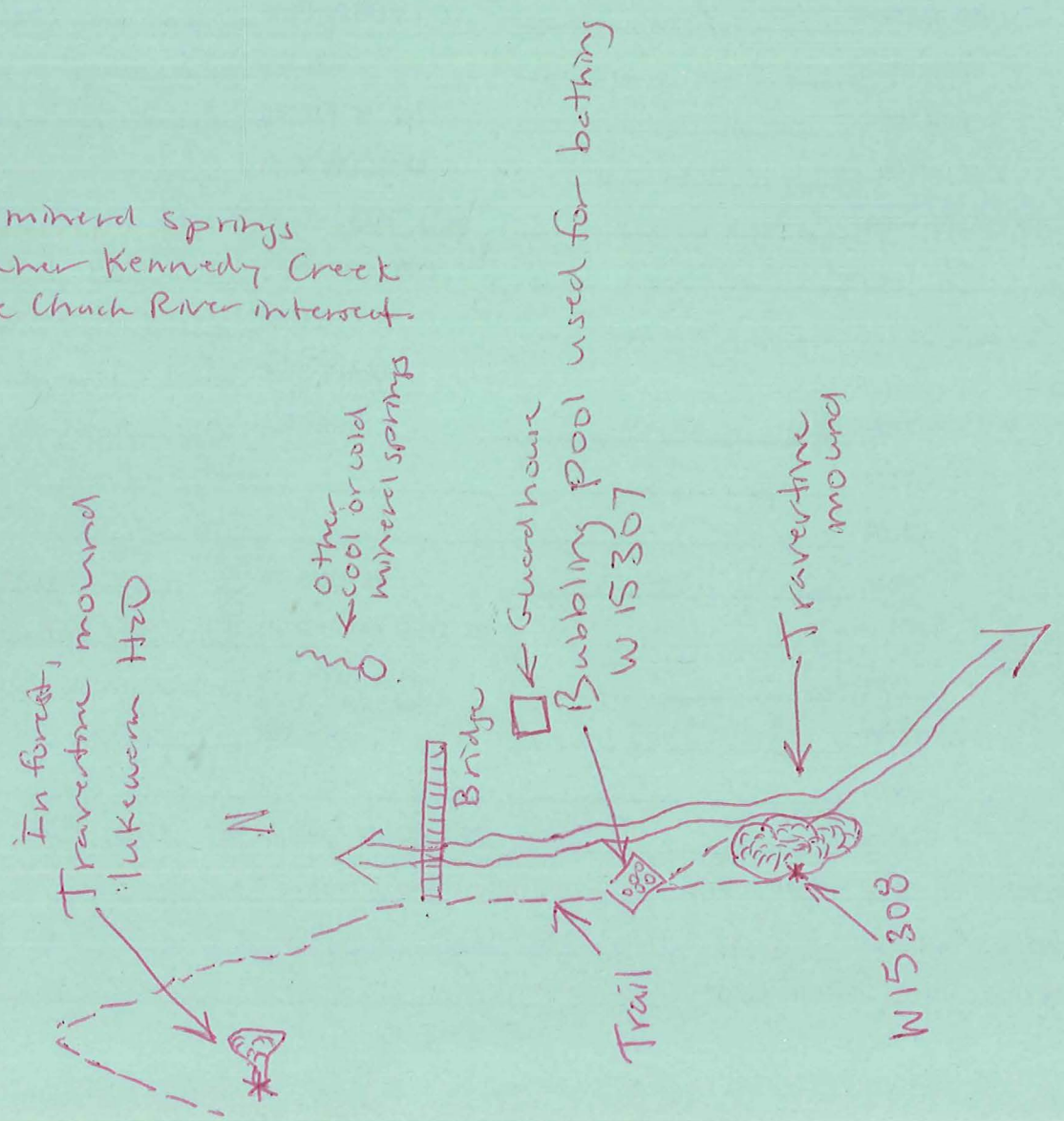


Photo DG5 - 7+8
No Photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15308 Date 9-12-81 Time 1:00 PM

Name Kennedy Hot Springs 7 Location: Co. Snohomish State WA

Sec. 1 Twp. 30N R. 12E ; 142 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3300' Quad. Glacier Peak

N 21.1
E 6.7

Sampler WA & DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 34°C

GROUND TEMP. °C —

AIR TEMP. ~25°C

ODOR Slightly sulphurous

FLUID COLOR orange cloudy

FLUID TASTE alkaline

BUBBLING No

BOILING No

VEGETATION No (orange algae)

FLUID ISSUES FROM fractures in bedrock

DISCHARGE ~2 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) metamorphic (schists + gneiss)

COLOR on one bank,

GRAIN SIZE ~~metamorphic~~ tuffs

MEGASCOPIC MINERALS on the other.

SALT:

TYPE No

QUANTITY _____

COLOR _____

FORM _____

Large travertine mound on river bank.

ALTERATION Stained orange

SINTER:

RX TYPE (AT DEPTH) metamorphic

TYPE No

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR recreation

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O

PROPERTY OWNED BY Glacier Peak wilderness

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 4-1

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. — Sample No. 15309 Date 9-13-81 Time 11:00 AM

Name — Location: Co. Skagit State WA

N 55.4 E 1.5

Sec. 3 Twp. 33N R. 10E ; 434 km/mi — OF —

Lat. — Long. — Elevation 680' Quad. Prairie Mtn.

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Spring found by seeing orange algae + precipitate in stream channel.

WATER TEMP. °C 13°C DISCHARGE ~ 2 gpm/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 22°C DEPTH —

ODOR No BORE —

FLUID COLOR Clear PUMP TYPE —

FLUID TASTE Slightly alkaline STATIC HEAD —

BUBBLING No SCALING —

BOILING No TYPE OF PIPING —

VEGETATION Yes ARTESIAN HEAD —

FLUID ISSUES FROM alluvium alongside small creek.

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

SALT:

TYPE None

QUANTITY —

COLOR —

FORM —

ALTERATION None visible

SINTER:

RX TYPE (AT DEPTH) Mildly metamorphosed basalt ?

TYPE None

QUANTITY —

COLOR —

FORM —

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Mineralized H_2O rising along fractures?

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15310 Date 9-13-81 Time 4:25 PM

Name — Location: Co. Snohomish State WA

Sec. 12 Twp. 32N R. 8E ; 4111 km/mi _____ OF _____

N 12.0
E 10.7

Lat. _____ Long. _____ Elevation 400' Quad. Fortson

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

Difficult to determine, several gpm

WATER TEMP. °C 7°C DISCHARGE _____ (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 24°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on valley floor. ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS silt + gravel

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) metamorphics?

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR Fish hatchery

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing in depression

PROPERTY OWNED BY Fish hatchery

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15311 Date 9-14-81 Time 4:00pm

Name — Location: Co. Whatcom State WA

Sec. 32 Twp. 39N R. 5E ; 2431 km/mi _____ OF _____

N 13.8 E 8.2

Lat. _____ Long. _____ Elevation 390' Quad. Van Zandt

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 9°c

GROUND TEMP. °C —

AIR TEMP. 23°c

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM Alluvium on hillside.

DISCHARGE ~ 30-40 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION No

RX TYPE (AT DEPTH) Metamorphics?

WATER USED FOR IMMEDIATE AREA USED FOR Deformed phyllites Drinking for nearby homes?

QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

Photo WA 4-2

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15312 Date 9-15-81 Time 12:00 Noon

Name _____ Location: Co. Whatcom State WA

Sec. 31 Twp. 40N R. 9E ;3433 km/mi _____ OF _____

N 27.7 E 6.8

Lat. _____ Long. _____ Elevation 2000' Quad. Mt. Shuksan

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: from 2 small springs

WATER TEMP. °C 7°C DISCHARGE ~1 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 21°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Alkaline STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Orange algae (or precipitate?) ARTESIAN HEAD _____

FLUID ISSUES FROM gravels alongside N. Fork Nooksack R. (south bank). ROCK DATA:

Orange stained gravels (no H2O) found nearby. TYPE (SURFACE) Gravel

COLOR —

SALT: GRAIN SIZE —

MEGASCOPIC MINERALS _____

TYPE None

QUANTITY _____

COLOR _____

FORM _____ ALTERATION No. Only stained

SINTER: RX TYPE (AT DEPTH) Nearby o/c of green tuff bx.

TYPE None WATER USED FOR IMMEDIATE AREA USED FOR No use.

QUANTITY _____

COLOR _____

FORM _____ QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Mineralized H2O surfacing.

PROPERTY OWNED BY Mt. Baker Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15313 Date 9-16-81 Time 10:40 AM

Name — Location: Co. Whatcom State WA

Sec. 3 Twp. 39N R. 4E ; 2331 km/mi _____ OF _____

N 26.7 Lat. _____ Long. _____ Elevation 250' Quad. Lynden

E 26.5 Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 13°C

GROUND TEMP. °C —

AIR TEMP. 20°C

ODOR No

FLUID COLOR Clear

FLUID TASTE ok

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on hillside. Collected at base of hill.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 2-3 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

ALTERATION None

RX TYPE (AT DEPTH) Sedimentary?

WATER USED FOR IMMEDIATE AREA Pasture

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O resurfacing

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15314 Date 9-16-81 Time 11:00 AM

Name — Location: Co. Whatcom State WA

Sec. 27 Twp. 40N R. 4E ; 31 km/mi _____ OF _____

N 31.2
E 25,5

Lat. _____ Long. _____ Elevation 130' Quad. Lynden

Sampler WA

Sample Type: (Spring (with pipe)), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 11.5°C DISCHARGE ~ 10 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 22°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE ok STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM glacial tills found in valley.

ROCK DATA:

TYPE (SURFACE) Glacial tills

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION No

SINTER:

RX TYPE (AT DEPTH) Sedimentary?

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Pasture

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing

PROPERTY OWNED BY G. Tjoelker

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15315 Date 9-16-81 Time 11:30

Name — Location: Co. Whatcom State WA

Sec. 33 Twp. 41N R. 4E ; 3342 km/mi _____ OF _____

N 43.5
E 23.3

Lat. _____ Long. _____ Elevation 90' Quad. Lynden

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 8.5°C DISCHARGE ~20 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. _____ DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM glacial tills found covering valley floor.

ROCK DATA:

TYPE (SURFACE) Glacial tills

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION None

SINTER:

RX TYPE (AT DEPTH) Sedimentary?

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR Pasture + crops.

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O resurfacing.

PROPERTY OWNED BY Private

PREVIOUS AND/OR CURRENT LEASES —

No Photo
WA 4-3

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15316 Date 9-22-81 Time 1:00 PM

Name — Location: Co. Cowlitz State WA

Sec. 20 Twp. 10N R. 1E ; 21 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation ? Quad. Hoquiam AMS

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Identified by orange ppt. in stream channel.

WATER TEMP. °C 18°C DISCHARGE ~ 10 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 16°C DEPTH _____

ODOR No BORE _____

FLUID COLOR clear PUMP TYPE _____

FLUID TASTE Alkaline STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION None ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium (mudflow) on floor of N. Fork of Toutle River valley.

ROCK DATA:

TYPE (SURFACE) mudflow + flood debris from St. Helens

COLOR lt. Grey

GRAIN SIZE —

MEGASCOPIC MINERALS —

SALT: Orange ppt. covering mineral spring channel.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

ALTERATION Stained orange

SINTER:

RX TYPE (AT DEPTH) Tertiary volcanics.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O resurfacing?

PROPERTY OWNED BY Private (Weyerhaeuser Co?)

PREVIOUS AND/OR CURRENT LEASES —

No Photo
WA 4-4

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15317 Date 9-22-8 Time 2:35 PM

Name — Location: Co. Skamania State WA

Sec. 6 Twp. 10N R. 5E ; 1122 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1800' Quad. Spirit Lake

Sampler WA

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Found by sighting orange ppt.

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 15°C

ODOR Slight sulphurous odor

FLUID COLOR Clear

FLUID TASTE Mineral rich (Alkaline)

BUBBLING No

BOILING No

VEGETATION No (orange algae?)

FLUID ISSUES FROM alluvium at bottom of Green River Valley

SALT: Orange ppt. found in channel of stream fed by spring.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

ALTERATION Stains orange + tuffs, bxs,

RX TYPE (AT DEPTH) Tertiary volcanics, andesites

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating H_2O resurfacing

PROPERTY OWNED BY Gifford Pinchot Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

WA4-5

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15318 Date 9-22-81 Time 3:25 PM

Name Soda spring Location: Co. Cowlitz State WA

Sec. 2 Twp. 10N R. 4E ; 2344 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1750' Quad. Elk Rock

Sampler WA+DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

* Notes on back *

DESCRIPTION:

WATER TEMP. °C 12°C

GROUND TEMP. °C —

AIR TEMP. 15°C

ODOR Slight sulphurous None; odor to mud.

FLUID COLOR Clear

FLUID TASTE Mineral rich

BUBBLING Yes.

BOILING No.

VEGETATION Abundant

FLUID ISSUES FROM alluvium at base of slope

DISCHARGE Difficult to determine. gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by Tertiary volcanics

COLOR tuffs, breccias, andesites, basalts.

GRAIN SIZE —

MEGASCOPIC MINERALS —

ALTERATION Result of age

RX TYPE (AT DEPTH) Volcanics

WATER USED FOR IMMEDIATE AREA USED FOR Recreation (at one time).

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

SALT:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

PROBABLE CAUSE OF MANIFESTATION Deep circulating H2O?

PROPERTY OWNED BY Weyerhaeuser Co?

PREVIOUS AND/OR CURRENT LEASES —

Abundant H_2O seeping from alluvium at base of slope. Much of this H_2O has a mildly alkaline taste to it. Some seeps had an orange substence precipitating out of it. Sample was collected from a slow flowing stream in which bubbles were visibly rising from small holes.

WA 4-6

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15319 Date 9-23-81 Time 10:40 AM

Name — Location: Co. Skamania State WA

Sec. 24 Twp. 7N R. 6E ; 3131 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1080' Quad. Mt. St. Helens

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow
found by sighting orange ppt.

DESCRIPTION:

WATER TEMP. °C 13.5°C

GROUND TEMP. °C —

AIR TEMP. 11°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Mineral rich

BUBBLING Minor (one hole)

BOILING No

VEGETATION No

FLUID ISSUES FROM mudflow debris in channel of Pine Creek

SALT: Orange ppt. on alluvium.

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE Seep gpm/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS —

ALTERATION Orange stained

RX TYPE (AT DEPTH) Tertiary volcanics.

WATER USED FOR IMMEDIATE AREA USED FOR (Mostly Flows) No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Mineralized H_2O surfacing (deep circulating?)

PROPERTY OWNED BY Gifford Pinchot Nat. Forest.

PREVIOUS AND/OR CURRENT LEASES —

WA4-7

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15320 Date 9-23-81 Time 11:20 Am

Name — Location: Co. Skamania State WA

Sec. 35 Twp. 8N R. 6E ; 2212 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1360' Quad. Mt. St. Helens

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: Found by sighting orange ppt. Several small springs found along roadside.

WATER TEMP. °C 11°C DISCHARGE Total ~ 1-2 ? (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 15°C DEPTH _____

ODOR Slight sulphurous odor BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Mineral rich STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION No ARTESIAN HEAD _____

FLUID ISSUES FROM mudflow debris along roadside. Muddy River valley.

ROCK DATA:

TYPE (SURFACE) Mudflow debris underlain by Tertiary welded tuff

COLOR Maroone red-brown

SALT: Orange ppt.

GRAIN SIZE —

TYPE None

MEGASCOPIC MINERALS few xtals, pumice (flattened) and lithics

QUANTITY _____

COLOR _____

FORM _____

ALTERATION Result of gsc

SINTER:

RX TYPE (AT DEPTH) Tertiary volcanics

TYPE None

WATER USED FOR IMMEDIATE AREA No use

QUANTITY _____

USED FOR _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Deep circulating mineralized H2O

PROPERTY OWNED BY Gifford Pinchot Nat. Forest

PREVIOUS AND/OR CURRENT LEASES —

WA4-8

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15321 Date 9-23-81 Time 5:30 PM

Name — Location: Co. Cowlitz State WA

Sec. 35 Twp. 9N R. 4E ;2244 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3960' Quad. Cougar

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

found by sighting orange ppt.

DESCRIPTION:

WATER TEMP. °C 8°C DISCHARGE ~1-2 gpm/(Lpm)

GROUND TEMP. °C — WELL DATA:

AIR TEMP. ~10°C or less DEPTH _____

ODOR slight sulphurous BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Mineral rich STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION No ARTESIAN HEAD _____

FLUID ISSUES FROM tephra were, the slope levels out.

ROCK DATA: ~1 foot of tephra underlain by

TYPE (SURFACE) Tertiary volc. flow rxs.

COLOR generally dark

SALT: Orange ppt.

GRAIN SIZE —

MEGASCOPIC MINERALS —

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION A result of great age.

SINTER:

RX TYPE (AT DEPTH) Tertiary volc.; basalts, and. some dacite, lots of tuffs.

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION ?

PROPERTY OWNED BY Gifford Pinchot Nat. Forest

PREVIOUS AND/OR CURRENT LEASES _____

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15322 Date 9-24-81 Time 10:40AM

Name — Location: Co. Cowlitz State WA

Sec. 31 Twp. 8N R. 3E ;2343 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3600' Quad. Cougar

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION: High; forms stream

WATER TEMP. °C 7°C DISCHARGE ~ 20-30 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 11°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Good STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION Abundant ARTESIAN HEAD _____

FLUID ISSUES FROM alluvium on mountain side

ROCK DATA:

TYPE (SURFACE) Alluvium

COLOR —

GRAIN SIZE —

MEGASCOPIC MINERALS _____

Locally underlain by zeolitized basalts

ALTERATION Result of age

RX TYPE (AT DEPTH) Tertiary volcanics

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

WATER USED FOR IMMEDIATE AREA USED FOR logging

QUALITY OF SAMPLE: (EXC), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H2O

PROPERTY OWNED BY Weyerhaeuser Co.

PREVIOUS AND/OR CURRENT LEASES —

No photo

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15323 Date 9-24-81 Time 11:35 AM

Name _____ Location: Co. Coulitz State WA

Sec. 17 Twp. 8N R. 3E ;242 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 3040' Quad. Cougar

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 5°C

GROUND TEMP. °C —

AIR TEMP. 8°C

ODOR No

FLUID COLOR Clear

FLUID TASTE Good

BUBBLING No

BOILING No

VEGETATION Abundant

FLUID ISSUES FROM alluvium on ridge.

SALT:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE None

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE ~ 1 (gpm) Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) Alluvium underlain by basalts.

COLOR dk grey

GRAIN SIZE < 1mm

MEGASCOPIC MINERALS plagioclase.

Vesicles Filled with zeolites

ALTERATION None visible

RX TYPE (AT DEPTH) Tertiary volcanics

WATER USED FOR IMMEDIATE AREA No use

USED FOR _____

QUALITY OF SAMPLE: EXC., (GOOD), POOR

PROBABLE CAUSE OF MANIFESTATION Meteoric H_2O

PROPERTY OWNED BY Weyerhaeuser CO.

PREVIOUS AND/OR CURRENT LEASES —

WA4-17

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. 15324 Date 9-24-81 Time 12:50 PM

Name — Location: Co. Cowlitz State WA

Sec. 27 Twp. 9N R. 3E ;3312 km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 1300' Quad. Cougar

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

Located by sighting orange ppt.

DESCRIPTION:

WATER TEMP. °C 11°C DISCHARGE ~ 2 (gpm)/Lpm

GROUND TEMP. °C — WELL DATA:

AIR TEMP. 14°C DEPTH _____

ODOR No BORE _____

FLUID COLOR Clear PUMP TYPE _____

FLUID TASTE Mineral rich STATIC HEAD _____

BUBBLING No SCALING _____

BOILING No TYPE OF PIPING _____

VEGETATION No ARTESIAN HEAD _____

FLUID ISSUES FROM mudflow debris along S. Fork of Toutle River.

ROCK DATA:

TYPE (SURFACE) Mudflow debris

COLOR —

SALT: Abundant orange ppt. in channel of stream fed by springs.

GRAIN SIZE —

MEGASCOPIC MINERALS —

TYPE None

QUANTITY _____

COLOR _____

FORM _____

ALTERATION Stained orange

SINTER:

RX TYPE (AT DEPTH) Tertiary volcanics (mostly basalts & andesites)

TYPE None

WATER USED FOR IMMEDIATE AREA USED FOR No use

QUANTITY _____

COLOR _____

FORM _____

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION Mineralized H2O surfacing?

PROPERTY OWNED BY Gifford Pinchot N.F. Forest + Weyerhaeuser Co.

PREVIOUS AND/OR CURRENT LEASES —

WA 4-18

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. _____ Sample No. W15325 Date 9/24/81 Time 2:00 PM

Name _____ Location: Co. COWLITZ State WA

Sec. 24S Sec 32 Twp. 9N R. 4E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation 2240' Quad. COUGAR

Sampler WA + DG

Sample Type: (Spring) (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow

DESCRIPTION:

WATER TEMP. °C 10°C

GROUND TEMP. °C —

AIR TEMP. 14°C

ODOR SULPHUROUS

FLUID COLOR CLEAR

FLUID TASTE FUNKY

BUBBLING _____

BOILING NO

VEGETATION ORANGE ALGAE

FLUID ISSUES FROM SEEP IN RECENT MUDFLOW FROM ST HELENS IN TOUTLE R. CHANNEL

SALT:

TYPE ORANGE STAIN FE OXIDE

QUANTITY _____

COLOR _____

FORM _____

SINTER:

TYPE _____

QUANTITY _____

COLOR _____

FORM _____

DISCHARGE 1 (gpm)/Lpm

WELL DATA:

DEPTH _____

BORE _____

PUMP TYPE _____

STATIC HEAD _____

SCALING _____

TYPE OF PIPING _____

ARTESIAN HEAD _____

ROCK DATA:

TYPE (SURFACE) RECENT MUDFLOW

COLOR LT GRAY (ASH)

GRAIN SIZE SILT → BOULDER

MEGASCOPIC MINERALS _____

ALTERATION —

RX TYPE (AT DEPTH) TERTIARY VOLCANICS

WATER USED FOR IMMEDIATE AREA USED FOR NONE LOGGING

QUALITY OF SAMPLE: (EXC.), GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION POSSIBLE HYDROTHERMAL WATER SURFACING

PROPERTY OWNED BY ?

PREVIOUS AND/OR CURRENT LEASES WEYERHAUSER

AMAX GEOTHERMAL GEOCHEMICAL SAMPLE FORM

Spring No. 737-54 Sample No. W 15502 Date 5/7/81 Time _____

Name _____ Location: Co. _____ State _____

Sec. 25 Twp. 17S R. 42E ; _____ km/mi _____ OF _____

Lat. _____ Long. _____ Elevation _____ Quad. _____

Sampler David Gragg

Sample Type: Spring (with pipe), well (with pipe), creek, river, soil, salt, sinter, travertine, gas, rock, snow ΔT hole @ 930'

DESCRIPTION:

WATER TEMP. °C 30° DISCHARGE 10 gpm ~~Lpm~~

GROUND TEMP. °C _____ WELL DATA:

AIR TEMP. _____ DEPTH 930'

ODOR _____ BORE _____

FLUID COLOR _____ PUMP TYPE _____

FLUID TASTE _____ STATIC HEAD _____

BUBBLING _____ SCALING _____

BOILING _____ TYPE OF PIPING _____

VEGETATION _____ ARTESIAN HEAD _____

FLUID ISSUES FROM ΔT hole ROCK DATA:

_____ TYPE (SURFACE) _____

_____ COLOR _____

SALT: GRAIN SIZE _____

TYPE N/A MEGASCOPIC MINERALS _____

QUANTITY _____ _____

COLOR _____ _____

FORM _____ ALTERATION _____

SINTER: RX TYPE (AT DEPTH) Chalk Butte Fm.

TYPE N/A WATER USED FOR IMMEDIATE AREA _____

QUANTITY _____ USED FOR _____

COLOR _____ _____

FORM _____ QUALITY OF SAMPLE: (EXC.) GOOD, POOR

PROBABLE CAUSE OF MANIFESTATION _____

PROPERTY OWNED BY _____

PREVIOUS AND/OR CURRENT LEASES _____

N 23.0
E 13.5

AMAX Geothermal: Mine Evaluation Report

DATE: 7-28-81 GEOLOGIST: Walter Avramenko

MAPS: Bald Knob Quadrangle, Washington

PHOTOS: — SAMPLE #: G11001

DISTRICT NAME: — MINES VISITED: Tunnel to SW of Bungalow mine

LOCATION: SEC: 11 T 33 (N) S R 31 (E) W COUNTY: Okanogan STATE: WA

TYPE OF DEPOSIT: Hypothermal (Mesothermal ?) CRYSTALINE FORM:

MODE OF OCCURRENCE: Veins

ROCK UNITS:

ALTERATION/MINERALIZATION: The host rock, a black dolostone which has in places been fractured and veined with calcite, has been cut by a few sulfide bearing quartz veins. Mineralization includes, pyrite, galena marcasite, sulphur.

HEAT FLOW DATA: None

REMARKS/FURTHER ASSESSMENT WORK: Only the mine dump alongside the road was visited. No tunnel, or shaft was found. No roads leading up to Bungalow mine were found.

N 15.9

E 18.65

AMAX Geothermal: Mine Evaluation Report

DATE: 7/30/81 GEOLOGIST: Hunt Anderwald

MAPS: Billy Goat Mtn 7.5' Wash

PHOTOS: None SAMPLE #: 11002

DISTRICT NAME: ? MINES VISITED: Billy Goat Corral

Clv - 4

LOCATION: SEC: 15 T 38 (N) S R 20 (E) W COUNTY: _____ STATE: _____

TYPE OF DEPOSIT: Fault Related CRYSTALINE FORM: pyrite, qtz

MODE OF OCCURRENCE: Vein deposit

ROCK UNITS: —

ALTERATION/MINERALIZATION: - copper (malifite, Azurite,) chlorite

HEAT FLOW DATA: None visible - Coldwater 8-10°C issues from mine, grandson of owner would not permit us to take a sample

REMARKS/FURTHER ASSESSMENT WORK: — owner - J. J. Adams, 182 Second St East Wanachee, 884 5896, gold silver copper

N 9.3
E 25.2

AMAX Geothermal: Mine Evaluation Report

DATE: 7/24/81 GEOLOGIST: D. GRAGG, W. AVRAMENKO

MAPS: BODIE MTN 15'

PHOTOS: DG 1-4 SAMPLE #: G 11003

DISTRICT NAME: ? MINES VISITED: KELLY MINE

LOCATION: SEC: 9 T 38 (N) S R 32 (E) W COUNTY: FERRY STATE: WA

TYPE OF DEPOSIT: MESOTHERMAL CRYSTALINE FORM: BOTTRIYODIAL MALACHITE, OTHERS MASSIVE

MODE OF OCCURRENCE: APALITE DIKES INTRUDING PHYLITE W 2NDARY ENRICHMENT

ROCK UNITS:

ALTERATION/MINERALIZATION: SECONDARY ENRICHMENT HAS PRODUCED MALACHITE, CALCITE, AS WELL AS PRIMARY QTZ DIKE INTRUSIVES

HEAT FLOW DATA: NONE

REMARKS/FURTHER ASSESSMENT WORK: NO CLAIM STAKES FOUND ALSO COMPARE WITH WATER SAMPLE W 1501/4 COLLECTED FROM NEARBY SPRING

N 1.7
E 10.5

AMAX Geothermal: Mine Evaluation Report

DATE: 7-31-81 GEOLOGIST: W. Avramenko

MAPS: Slate Peak and Pasayten Peak

PHOTOS: — SAMPLE #: 11004

DISTRICT NAME: Windy Pass MINES VISITED: Only one, small, abandoned tunnel was visited

LOCATION: SEC: 27 T 38 (N) S R 17 (E) W COUNTY: Okanogan STATE: WA

TYPE OF DEPOSIT: Hypo-Mesothermal CRYSTALINE FORM:

MODE OF OCCURRENCE: Primarily as veins at this locality

ROCK UNITS: Major rock unit appears to be a slightly metamorphosed (?) dolostone.

ALTERATION/MINERALIZATION: Alteration and mineralization found along a fault/shear zone less than 1m wide. Quartz veins that vary in thickness and contain pyrite, galeena and perhaps a few other unidentifiable minerals, was emplaced along this fault zone within the dolostone

HEAT FLOW DATA: None.

REMARKS/FURTHER ASSESSMENT WORK: This locality contains a few other mines as well, some of which are presently being worked. Road leading up to the mines is privately owned and is capable of being locked.

AMAX Geothermal: Mine Evaluation Report

DATE: 8-4-81 GEOLOGIST: W. Avramenko

MAPS: Twisp 15' Quad., Washington

PHOTOS: — SAMPLE #: No sample collected

DISTRICT NAME: — MINES VISITED: Minnie Mine

LOCATION: SEC: 22-23 T 32 (N) S R 22 (E) W COUNTY: Okanogen STATE: WA

TYPE OF DEPOSIT: Hypo-Mesothermal vein CRYSTALINE FORM:

MODE OF OCCURRENCE: Ore mineralization occurs within quartz veins

ROCK UNITS: Host rock consists of white marble and biotite schists.

ALTERATION/MINERALIZATION: Host rock is cut by iron-stained milky quartz veins of variable thickness (probably ∠.5m wide. Quartz xtals are fairly common. Pyrite and covalite (?) are found close to the margins of the veins. Secondary minerals include limonite, azurite (not common), and crysocolla

HEAT FLOW DATA: None

REMARKS/FURTHER ASSESSMENT WORK: This mine is currently being worked. The hillside to the west of the creek has been carved out and a new tunnel added. Ore will shortly be leached by owner. Owner claims that gold is found in the rocks.

AMAX Geothermal: Mine Evaluation Report

DATE: 8-3-81 GEOLOGIST: W. Avramenko

MAPS: Loomis Quad (15')

PHOTOS: — SAMPLE #: 11006

DISTRICT NAME: _____ MINES VISITED: Horn Silver Mine

LOCATION: SEC: 21 T 40 (N) S R 26 (E) W COUNTY: Okanogen STATE: WA

TYPE OF DEPOSIT: mesothermal(?) Vein CRYSTALINE FORM: finely xtalline

MODE OF OCCURRENCE: Primarily as vein with some disseminations.

ROCK UNITS: Occures within a granodiorite host (?). Occasionally the rock appears to be gabbroic in mineralogy and appearance.

ALTERATION/MINERALIZATION: The area in the vicinity of the shafts appears to be silicified, looking almost like a quartzite. Veins of quartz with some calcite are visible in the tunnel. Pyrite + some unidentifiable copper sulfide (minor) are found in these veins, along joints and disseminated in the surrounding rock.

HEAT FLOW DATA: None.

REMARKS/FURTHER ASSESSMENT WORK: Vein in tunnel 4.5m wide but surrounded by an alteration halo 2 or more meters wide. Inactive. Secondary azurite + crysacola (minor amounts) also found in veins.

AMAX Geothermal: Mine Evaluation Report

DATE: 8-3-81 GEOLOGIST: W. Avramenko

MAPS: Loomis 15' Quad

PHOTOS: — SAMPLE #: 11007

DISTRICT NAME: _____ MINES VISITED: Triune Mine

LOCATION: SEC: 10 T 39 (N) S R 26 (E) W COUNTY: Okanogen STATE: WA

TYPE OF DEPOSIT: Vein CRYSTALINE FORM: Finely crystalline ore

MODE OF OCCURRENCE: ore disseminated in host rock and in qtz veins.

ROCK UNITS: Host rock appears to be a metamorphic rock (alteration hinders identification) perhaps phyllite. Intruded by monzonite (?) and milky quartz veins. These veins reach 2m in thickness and are very numerous. The quartz is generally barren of all other minerals. Some faulting is evident in mine walls.

ALTERATION/MINERALIZATION: Visible ore consists of pyrite, galena, and minor amounts of copper sulfide. Pyrite found disseminated in host rock, all three are also found in the qtz veins. Pyrite is actively being altered to limonite.

HEAT FLOW DATA: H_2O sample (W15257) was collected from one nearby mine.

REMARKS/FURTHER ASSESSMENT WORK:

A new-looking PVC pipe (≈ 3" in diam.) was found near T39N, R26E, sec 11, 1312 at end of short road.

AMAX Geothermal: Mine Evaluation Report

DATE: 8-4-81 GEOLOGIST: W. Arramenko

MAPS: Twisp 15' Quad, Washington

PHOTOS: SAMPLE #: 11008

DISTRICT NAME: MINES VISITED: Alder Mine, tunnel and open pit on hillside.

LOCATION: SEC: 36 T 33 (N) S R 21 (E) W COUNTY: Okanogan STATE: WA

TYPE OF DEPOSIT: Hypothermal CRYSTALINE FORM:

MODE OF OCCURRENCE: Disseminated ore and in veins.

ROCK UNITS: Host rock appears to be a strongly deformed, sheared and faulted series of metamorphic rocks, including quartzite, phyllites, and possibly greenstone. The entire hillside appears to have be altered by mineralizing fluids. Blocks of granodiorite were also found nearby

ALTERATION/MINERALIZATION: The rock in the vicinity of the mine has been silicified, and cut by a few quartz and ore veins. Pyrite, limonite, and hematite are abundant. Massive pyrite occasionally forms veins. Some galena, as well as several other Fe and Cu bearing minerals can be found; secondary Cu minerals less common.

HEAT FLOW DATA: H2O sample (W15259) collected from the tunnel.

REMARKS/FURTHER ASSESSMENT WORK:

Probably mined for gold.

N
E

AMAX Geothermal: Mine Evaluation Report

DATE: Aug 1, 1981 GEOLOGIST: Shenker - Huntsman

MAPS: Colville 15'

PHOTOS: _____ SAMPLE #: G11014

DISTRICT NAME: none MINES VISITED: small prospect pit 4'x6'x6'

LOCATION: SEC: 7 (4th) T 40 (N) S R 27 (E) W COUNTY: OKAN STATE: WA

TYPE OF DEPOSIT: Cu, Ag ? CRYSTALINE FORM: fine

MODE OF OCCURRENCE: ~~ve~~ sulphide in veinlets

ROCK UNITS: phyllite - Mesozoic - near Tertiary Volcanic rocks.

ALTERATION/MINERALIZATION: no apparent alt. - Chalcopyrite and pyrite as crusts on open veinworks.

HEAT FLOW DATA: H_2O @ 43°C in major fault trending ~N45E. Mineralization is in fractures ⊥ to fault.

REMARKS/FURTHER ASSESSMENT WORK: water not as salty as Poison Lake.
→ Check for available geologic mapping.

N

E

AMAX Geothermal: Mine Evaluation Report

DATE: 7/28/81 GEOLOGIST: Huntsman

MAPS: Keller 15' WASH

PHOTOS: NONE SAMPLE #: G 11020

DISTRICT NAME: MINES VISITED: Pacific Mutual Mines

LOCATION: SEC: 31 T 30 (N) S R 34 (E) W COUNTY: Ferry STATE: Wash

TYPE OF DEPOSIT: Sulfides CRYSTALINE FORM:

MODE OF OCCURRENCE: Qtz veins

ROCK UNITS:

ALTERATION/MINERALIZATION: Sulfides, lead, copper

HEAT FLOW DATA: None

REMARKS/FURTHER ASSESSMENT WORK: Assay

N 37.0
E 2.3

AMAX Geothermal: Mine Evaluation Report

DATE: 7/23/81 GEOLOGIST: D. GRAGG, W. AVRAMENKO

MAPS: BODIE MTN QUAD 15'

PHOTOS: _____ SAMPLE #: G 11021

DISTRICT NAME: _____ MINES VISITED: MAGNETIC MINE (LOWER ADIT)

LOCATION: SEC: 13 T 40 (N) S R 30 (E) W COUNTY: OKANOGAN STATE: WA

TYPE OF DEPOSIT: HYPOTHERMAL CRYSTALINE FORM: _____

MODE OF OCCURRENCE: VEIN FOLLOWS FAULTED ZONE IN GRANITIC RX

ROCK UNITS: _____

ALTERATION/MINERALIZATION: MINERALS INCLUDE, EPIDOTE, GARNET MAGNETITE, PYRRHOTITE, QUARTZ, CALCITE, AND PERHAPS CHALCOPYRITE PENTLANDITE. Ore body was composed largely of massive magnetite.

HEAT FLOW DATA: WATER 5°C

REMARKS/FURTHER ASSESSMENT WORK: SEE WATER SAMPLE W 14729 WHICH WAS COLLECTED FROM WATER ISSUING FROM LOWER ADIT WATER 5°C

N 27.9

E 27.35

AMAX Geothermal: Mine Evaluation Report

DATE: 7/30/81 GEOLOGIST: D. GRAGG

MAPS: ALAMEDA FLAT 15'

PHOTOS: DG 1-15 SAMPLE #: G 11023

DISTRICT NAME: _____ MINES VISITED: APACHE MINE

LOCATION: SEC: (34) 27 T 31 (N) S R 30 (E) W COUNTY: OKANOGAN STATE: WA

TYPE OF DEPOSIT: HYPOTHERMAL CRYSTALINE FORM: EUHEDRAL

MODE OF OCCURRENCE: HYPOTHERM IN VEINS ALONG FRACTURES

ROCK UNITS: QUARTZ MONZONITE PORPHYRY

ALTERATION/MINERALIZATION: PYRITE wx to SULPHUR & GOSSAN DEPOSITS ALONG FRACTURES IN MONZONITE PORPHYRY, GAL

HEAT FLOW DATA: _____

REMARKS/FURTHER ASSESSMENT WORK: SEE W 15021

AMAX Geothermal: Mine Evaluation Report

DATE: 9/8/81 GEOLOGIST: D. GRAGG

MAPS: LIBERTY 15'

PHOTOS: DG 2-11 SAMPLE #: 611028 & 611029

DISTRICT NAME: SWAUK MINES VISITED: LUCKY DAY #1 & LUCKY DAY #2

LOCATION: SEC: 6 T 20 (N) S R 18 (E) W COUNTY: KITTITAS STATE: WA

TYPE OF DEPOSIT: EPITHERMAL CRYSTALINE FORM: EUHEDRAL TO MASSIVE

MODE OF OCCURRENCE: IN QTZ VEINS ALONG A SERIES OF SAME NE TRENDING FAULTS

ROCK UNITS: FAULT CUTS THROUGH VOLCANOCLASTIC SANDSTONES AND SHALES WHICH ARE ABUTTED AGAINST BK MASSIVE BASALTS IN NEAR DEAR GLUCH. ALL ARE TERTIARY IN AGE

ALTERATION/MINERALIZATION: PYRITE, CALCITE, CHALCOPYRITE, ARSENOPYRITE, REPORT OF NATIVE MERCURY, QUARTZ

HEAT FLOW DATA: —

REMARKS/FURTHER ASSESSMENT WORK: PROPERTY CLAIMED BY ROB DALO IN WENATCHEE W.E.

TYPE OF SAMPLE

W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS

Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS)_____

_____

A TOTAL OF_____ HAS BEEN SHIPPED VIA_____ ON_____
(No. of Boxes or Sacks) (Carrier) (Date)

LAB JOB No._____ REPORT DATED_____ AMAX PROJECT No._____

SAMPLE NUMBERS			ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
	No.	Type	tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH			Alk	T.E.				

TOTAL SAMPLES_____

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO_____ OFFICE)

SAMPLES MISSING_____

SPECIAL INSTRUCTIONS OR REMARKS_____

_____

_____

_____

_____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received_____ Anal. Cost_____

1._____

2._____

3._____

4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80227 (2 Copies)___

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY_____

DATE_____

TYPE OF SAMPLE

W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
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P=Pulp

ABBREVIATIONS

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T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS)_____

_____

A TOTAL OF_____ HAS BEEN SHIPPED VIA_____ ON_____
(No. of Boxes or Sacks) (Carrier) (Date)

LAB JOB No._____ REPORT DATED_____ AMAX PROJECT No._____

SAMPLE NUMBERS			ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
	No.	Type	tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH			Alk	T.E.				

TOTAL SAMPLES_____

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO_____ OFFICE)

SAMPLES MISSING_____

SPECIAL INSTRUCTIONS OR REMARKS_____

_____

_____

_____

_____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received_____ Anal. Cost_____

1._____

2._____

3._____

4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80227 (2 Copies)___

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY_____

DATE_____

MAIL

(FROM LAST SAMPLE SHIPMENT)

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
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ABBREVIATIONS
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T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5+Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

Nº 8235

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) AMAX Denver

A TOTAL OF 4 (No of Boxes or Sacks) HAS BEEN SHIPPED VIA _____ (Carrier) ON _____ (Date)

LAB JOB No. _____ REPORT DATED _____ AMAX PROJECT No. 864

SAMPLE NUMBERS	No.	Type	ASSAYS (%) tMo	MoS_2	Cu	nsCu				GEOCHEMICAL (ppm) Mo	Cu	W	Ni	pH			OTHER Alk	T.E.		*		
W-14991-94	4	W																				

TOTAL SAMPLES

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO _____ OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS * Geothermal Water Analysis
Na, Ca, K, Mg, SiO_2, F, Cl, SO_4, B, Li, Cu, Mo

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1. J. E. DEYMONAZ, Geothermal
2. _____
3. _____
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80226 (2 Copies)

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY John E Deymonaz

DATE 4/30/81

MAIL

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS
Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5+Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

Nº 8236

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) AMAX, DENVER
7100 W. 44TH AVE WHEAT RIDGE, CO. 80033

A TOTAL OF 1 Box (No of Boxes or Sacks) HAS BEEN SHIPPED VIA _____ (Carrier) ON _____ (Date)

LAB JOB No. _____ REPORT DATED _____ AMAX PROJECT No. 864

SAMPLE NUMBERS	No.	Type	ASSAYS (%) tMo	MoS_2	Cu	nsCu				GEOCHEMICAL (ppm) Mo	Cu	W	Ni	pH			OTHER Alk	T.E.		*		
W 14995																				✓		
W 14996																				✓		
W 14997																				✓		
TOTAL SAMPLES																						

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO _____ OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS * GEOTHERMAL WATER ANALYSIS
(Na, Ca, K, Mg, SiO_2, F, Cl, SO_4, B, Li, Cu, Mo)

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1. J. E. Deymonaz GEOTHERMAL BRANCH
2. _____
3. _____
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80226 (2 Copies)

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY Mark A Avery

DATE 04/17/81

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS
Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

12413

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) West Cedar Drive, Denver

A TOTAL OF 1 (No. of Boxes or Sacks) HAS BEEN SHIPPED VIA hand (Carrier) ON April 30, 1981 (Date)

LAB JOB No. _____ REPORT DATED _____ AMAX PROJECT No. 864

			ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
SAMPLE NUMBERS	No.	Type	tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH	*		Alk	T.E.				
McCoy W14995 - 997	3	W													✓							
Gillard W14231	1	W													✓							

TOTAL SAMPLES 4

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO _____ OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS * Standard geothermal plus Sp. Cond., HCO_3-CO_3

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1. Shenker, Geothermal
2. Deymonaz, Geothermal
3. _____
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80227 (2 Copies)

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY Alan E. Shenker

DATE April 30, 1981

w/ SAMPLE

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS
Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5+Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

Nº 8236

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS)_____

_____

A TOTAL OF _____ (No of Boxes or Sacks) HAS BEEN SHIPPED VIA _____ (Carrier) ON _____ (Date)

LAB JOB No._____ REPORT DATED_____ AMAX PROJECT No._____

SAMPLE NUMBERS			ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
	No.	Type	tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH			Alk	T.E.				

TOTAL SAMPLES

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO _____ OFFICE)

SAMPLES MISSING_____

SPECIAL INSTRUCTIONS OR REMARKS_____

_____

_____

_____

_____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1._____

2._____

3._____

4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80226 (2 Copies)_____

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY_____

DATE_____

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS
Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
Org=Organic Extraction Cu Zn

N° 5121

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) AMAX Denver

A TOTAL OF 1 (No of Boxes or Sacks) HAS BEEN SHIPPED VIA U.P.S. (Carrier) ON 05/12/81 (Date)

WAYBILL No. _____ AMAX PROJECT No. 864

McCoy

SAMPLE NUMBERS	No.	Type	ASSAYS (%) tMo	MoS_2	Cu	nsCu				GEOCHEMICAL (ppm) Mo	Cu	W	Ni	pH			OTHER Alk	T.E.	5	10	Org	*
W 14998 to																						X
to																						
to																						
to																						
to																						
to																						

TOTAL SAMPLES

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS * GEOTHERMAL WATER ANALYSIS
Na, K, Ca, Mg, SiO_2, F, Cl, SO_4, B, Li, Cu, Mo
and specific conductance

SEND COPIES OF RESULTS TO:

1. John Deymonaz GEOTHERMAL BRANCH
2. _____
3. _____
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80226 (2 Copies)

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY Mark A Avery

DATE 05/11/81

TYPE OF SAMPLE
W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS
Alk=K_2O, Na_2O, CaO
T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

12403

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) AMAX, DENVER

A TOTAL OF 1 (No. of Boxes or Sacks) HAS BEEN SHIPPED VIA U.P.S. (Carrier) ON 05/15/81 (Date)

LAB JOB No. _____ REPORT DATED 05/14/81 AMAX PROJECT No. 864

SAMPLE NUMBERS	No.	Type	ASSAYS (%) tMo	MoS2	Cu	nsCu				GEOCHEMICAL (ppm) Mo	Cu	W	Ni	pH			OTHER Alk	T.E.	*			
W 14999																			X			
W 1500D																			X			
TOTAL SAMPLES																						

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO _____ OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS * GEOTHERMAL WATER ANALYSIS
Na, K, Ca, Mg, SiO_2, F, Cl, SO_4, B,
Li, Cu, Mo
Specific Conductance

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1. JOHN DEYMONAZ AMAX (GEOTHERMAL BRANCH)
2. _____
3. _____
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80227 (2 Copies)

REQUESTED BY Mark A Avery

DATE 05/14/81

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

TYPE OF SAMPLE
W=Water, S=Soil
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DF=Dump Fines
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P=Pulp

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s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5+Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

12499

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS) Skyline

A TOTAL OF 1 (No of Boxes or Sacks) HAS BEEN SHIPPED VIA Mail (Carrier) ON 6-9-81 (Date)

LAB JOB No. _____ REPORT DATED _____ AMAX PROJECT No. 737

SAMPLE NUMBERS	No.	Type	ASSAYS (%) tMo	MoS_2	Cu	nsCu				GEOCHEMICAL (ppm) Mo	Cu	W	Ni	pH			OTHER Alk	T.E.				
C-10-81-001	2	P													4	4			4			

TOTAL SAMPLES 2

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO Cathedral OFFICE)

SAMPLES MISSING _____

SPECIAL INSTRUCTIONS OR REMARKS _____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received _____ Anal. Cost _____

1. AE Shanks Cathedral
2. HJ Olson Inc Huntsman Cathedral
3. VL D Mullen Denver
4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80226 (2 Copies)

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY Harry J. Olson (DK)

DATE 6-9-81

SKYLINE LABS, INC.
SPECIALISTS IN EXPLORATION GEOCHEMISTRY
12090 WEST 50TH PLACE • WHEAT RIDGE, COLORADO 80033 • TEL.: (303) 424-7718

REPORT OF ANALYSIS

JOB NO. DAU 309
July 17, 1981
REQUISITION NO. 12499
PROJECT NO. 737

AMAX Geothermal, Inc.
Attn: A. E. Shenker
7100 West 44th Avenue
Wheatridge, Colorado 80033

Analysis of 2 Pulp Samples

ITEM	SAMPLE NO.	Au (ppm)	Ag (ppm)	Hg (ppm)	
1	G10000	<.02	.2	35.00	Jordan N.C.
2	G10001	<.02	.4	.02	Road to #46 qtz. vein

Edwin H. Post
for Gordon H. VanSickle
Manager

DETERMINATIONS:

Au & Ag - Atomic absorption
Hg - Vapor phase atomic absorption

cc's: H. J. Olson, Wheat Ridge
W. C. Huntsman, Wheat Ridge
L. D. Mullen
AMAX, Lakewood

TYPE OF SAMPLE

W=Water, S=Soil
SS=Stream Sediment
V=Vegetation
R=Rock
DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

ABBREVIATIONS

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T.E=Trace Elements (Standard elements unless defined otherwise.)
t=Total; tMo, tS ox=Oxide
s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS)_____

_____

A TOTAL OF_____ HAS BEEN SHIPPED VIA_____ ON_____
(No. of Boxes or Sacks) (Carrier) (Date)

LAB JOB No._____ REPORT DATED_____ AMAX PROJECT No._____

SAMPLE NUMBERS			ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
	No.	Type	tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH			Alk	T.E.				
TOTAL SAMPLES																						

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO_____ OFFICE)

SAMPLES MISSING_____

SPECIAL INSTRUCTIONS OR REMARKS_____

_____

_____

_____

_____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received_____ Anal. Cost_____

1._____

2._____

3._____

4. AMAX EXPLORATION INC., P.O. BOX C, BELMAR STATION, DENVER, COLORADO 80227 (2 Copies)___

Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY_____

DATE_____

TYPE OF SAMPLE

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SS=Stream Sediment
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DR=Dump Rock
DF=Dump Fines
CR=Core
CM=Composite
P=Pulp

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s=Sulfide; as sNi
ns=Non-Sulfide; as nsCu
5=Cu, Mo, Pb, Zn, Ag
10=5 + Co, Ni, Fe, Mn, Cd
B=Bauxite analyses % SiO_2, LOI, Al_2O_3, Fe_2O_3

REQUISITION FOR ANALYTICAL WORK

(REFER TO REQUISITION NO. IN ALL CORRESPONDENCE)

TO: (LAB AND ADDRESS)_____

A TOTAL OF_____ (No. of Boxes or Sacks) HAS BEEN SHIPPED VIA_____ (Carrier) ON_____ (Date)

LAB JOB No._____ REPORT DATED_____ AMAX PROJECT No._____

SAMPLE NUMBERS	No.	Type	ASSAYS (%)							GEOCHEMICAL (ppm)							OTHER					
			tMo	MoS_2	Cu	nsCu				Mo	Cu	W	Ni	pH			Alk	T.E.				
Bully Ck. #54																						
TOTAL SAMPLES																						

REJECTS: Save ☐ Discard ☐ (RETURN ALL PULPS TO_____ OFFICE)

SAMPLES MISSING_____

SPECIAL INSTRUCTIONS OR REMARKS_____

SEND COPIES OF RESULTS TO: (For Geologists Use) Data Received_____ Anal. Cost_____

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2. _____
3. _____
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Original — Lab. via Mail
Pink cc — Lab. with sample
Yellow cc — Denver office
White cc — Retain by sender

REQUESTED BY_____

DATE_____