Hematology

WBC		8.9	4.0 - 11.0 x E9/L
RBC	**HI**	**5.31**	4.00 - 5.10 x E12/L
Hemoglobin		125	120 - 160 g/L
Hematocrit		0.395	0.350 - 0.450 L/L
MCV	**LO**	**74**	80 - 100 fL
MCH	**LO**	**23.5**	27.5 - 33.0 pg
MCHC		316	305 - 360 g/L
Platelets		304	150 - 400 x E9/L
RDW	**HI**	**16.5**	11.5 - 14.5 %

Differential

Neutrophils	6.2	2.0 - 7.5 x E9/L
Lymphocytes	2.2	1.0 - 3.5 x E9/L
Monocytes	0.4	0.2 - 1.0 x E9/L
Eosinophils	0.1	0.0 - 0.5 x E9/L
Basophils	0.0	0.0 - 0.2 x E9/L

Morphology

WBC Morphology	NORMAL
RBC Morphology	Few Elliptocytes/Ovalocytes Slight Microcytosis
Platelet Morphology	NORMAL
Pathologist Review --	RBC indices and features suggestive of thalassemia or hemoglobinopathy. Recommend hemoglobin fractionation only if status unknown.

Hemoglobinopathy/Thalassemia Investigation

Hemoglobin Investigation

Hemoglobin A2	**LO**	**0.022**	0.023 - 0.034
Hemoglobin C/Total Hemoglobin		NOT DETECTED	
Hemoglobin E/Total Hemoglobin		NOT DETECTED	
Hemoglobin F/Total Hemoglobin		<0.010	0.000 - 0.020
Hemoglobin S/Total Hemoglobin		NOT DETECTED	

Hemoglobin Fractionation Abnormal Peaks

A Hb A2 level that is not elevated largely excludes Beta thalassemia trait, but not Alpha thalassemia.
If Alpha thalassemia is suspected, please order a Hb H Preparation.

Biochemical Investigation of Anemias

Vitamin B12	**HI**	**886**	138-652 pmol/L
Ferritin		56	5-272 ug/L

Urinalysis

Urinalysis Chemical

Colour	YELLOW	NONE/YELLOW
Appearance	CLEAR	CLEAR
Specific Gravity	1.010	1.001 - 1.030
pH	5.0	5.0 - 8.0

Protein		NEGATIVE	NEGATIVE g/L
Glucose		NEGATIVE	NEGATIVE mmol/L
Ketones	**HI**	**= OR >8.0**	NEGATIVE mmol/L
Erythrocytes		NEGATIVE	NEGATIVE mg/L
Nitrite		NEGATIVE	NEGATIVE
Leukocyte Esterase	**HI**	**75**	NEGATIVE WBC/uL

General Chemistry

Glucose Fasting	**LO**	**3.1**	3.6 - 6.0 mmol/L
Hemoglobin A1C		5.1	<6.0 %
Sodium		141	135-145 mmol/L
Potassium	**HI**	**5.7**	3.5-5.2 mmol/L
Creatinine		98	50-100 umol/L
Glomerular Filtration Rate (eGFR)		117	> OR = 90ml/min/1.73m2
Urate	**HI**	**442**	150-390 umol/L
Albumin		46	35-52 g/L
Bilirubin Total	**HI**	**21**	<20 umol/L
Alkaline Phosphatase		48	35-120 U/L
Alanine Aminotransferase		8	<36 U/L
Lactate Dehydrogenase		141	110-230 U/L

Lipids

Everything was normal in the lipid panel

Thyroid Function

Thyroid Stimulating Hormone [TSH]	**LO**	**0.31**	0.32-4.00 mIU/L

Pituitary Function

Follicle Stimulating Hormone [FSH] 8.9 IU/L

Follitropin (FSH) female reference intervals

Follicular: 3.0-8.0 IU/L
Mid-cycle: 3.0-22.0 IU/L
Luteal: 1.5-5.5 IU/L
Post-menopausal: 27.0-133.0 IU/L

Luteinizing Hormone [LH] 29.7 IU/L

Lutropin (LH) female reference intervals

Follicular: 2.0-12.0 IU/L
Mid-cycle: 8.0-90.0 IU/L
Luteal: 1.0-14.0 IU/L
Post-menopausal: 5.0-62.0 IU/L

Adrenocorticotropic Hormone [ACTH]

Adrenocorticotropic Hormone [ACTH] 2.0 < 14.0 pmol/L
Collection Time 11:30

Cortisol AM

Cortisol AM 309 135-537 nmol/L
Collection Time 07:51

Reproductive and Gonadal

Estradiol 476 pmol/L

		Estradiol adult female reference intervals ---------- Follicular: 77-921 pmol/L Mid-cycle: 139-2382 pmol/L Luteal: 77-1145 pmol/L Post-menopausal: <103 pmol/L
Progesterone	2.0 nmol/L	Progesterone adult female reference intervals ---------- Follicular: <1.7 nmol/L Luteal: 4.0-50.0 nmol/L Post-menopausal: <1.7 nmol/L
Dehydroepiandrosterone [DHEA-S]	7.8	< 9.8 umol/L

Microbiology

Urine Culture

Specimen Source	MIDSTREAM URINE
Colony Count	>100 x E6 CFU/L
Culture Status	Final
Organism	*1) Lactobacillus species* Organism(s) in culture considered to be non-pathogens; suggestive of specimen contamination.