REPORT NO.		I.D. NO.	173891	DATE REC'D.	07-Mar-2013	DATE REPORTED	08-Mar-2013	SAMPLE WILL BE KEPT UNTIL	22-Mar-2013	LABORATORY NUMBER	AI51636 - AI51637

Soil Analysis

Conducted by:

AgSource Harris Laboratories

THIS ANALYSIS RUN FOR:

ENGO, s.r.o.
Bulharska 35
91701 Trnava, - Slovakia

THIS ANALYSIS REQUESTED BY:

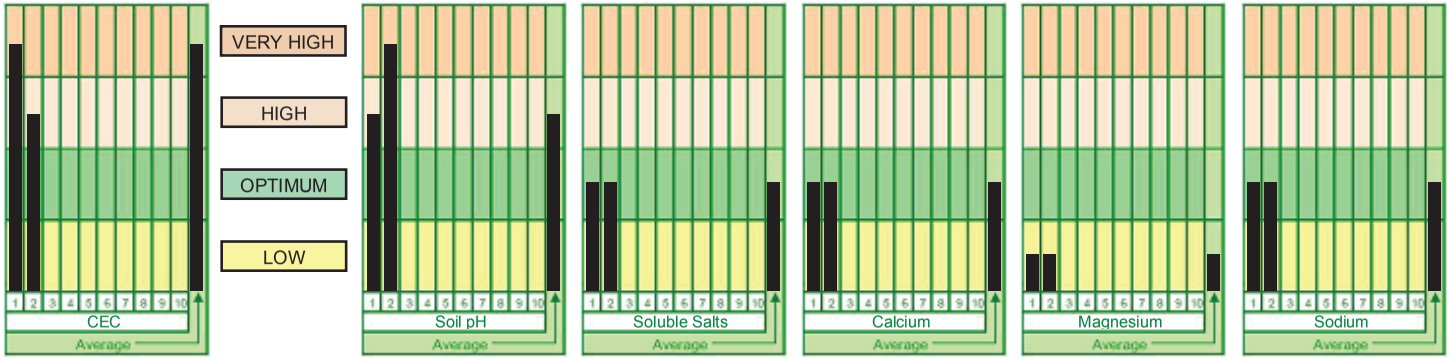
ENGO LTD
BULMARSKA
TRNAJA SLOVAKIA 91701

CODING INFORMATION

	Sample Description	Composite Information	Plant Variety	Sample Nature
1	OT1		GO	
2	OT2		GO	
3				
4				
5				
6				
7				
8				
9				
10				

NUTRIENT RESULTS

Code →	1	2	3	4	5	6	7	8	9	10	AVERAGES
Sample Description	OT1	OT2									
CEC	17.7	15.1									16.4
Soil pH	7.0	7.9									7.5
Buffer pH											
Soluble Salts (mmhos/cm)	0.29	0.28									0.29
Exchangeable Calcium (ppm)	3122	2791									2957
Exchangeable Magnesium (ppm)	161	52									107
Exchangeable Sodium (ppm)	38	17									28
% H Base Saturation	0.0	0.0									0.0
% K Base Saturation	3.2	4.5									3.9
% Mg Base Saturation	7.6	2.9									5.3
% Ca Base Saturation	88.2	92.1									90.2
% Na Base Saturation	0.9	0.5									0.7



AI51636 - AI51637

TECH REP NOTES

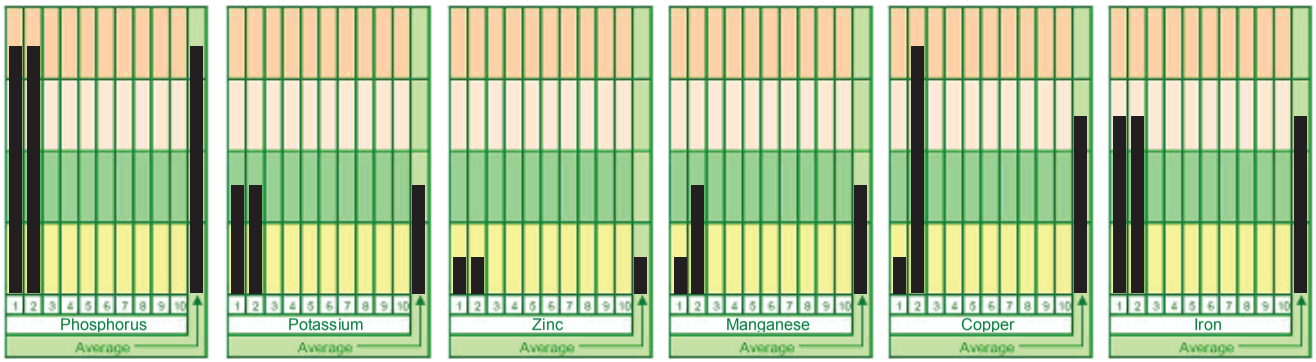
Code →	1	2	3	4	5	6	7	8	9	10	AVERAGES
Available Phosphorus (ppm)	110.0	121.0									115.5
Exchangeable Potassium (ppm)	223.0	268.0									245.5
Available Zinc (ppm)	0.6	3.2									1.9
Available Manganese (ppm)	4.6	11.2									7.9
Available Copper (ppm)	1.2	6.7									4.0
Available Iron (ppm)	46.0	80.6									63.3

VERY HIGH

HIGH

OPTIMUM

LOW



* RECOMMENDATIONS

These recommendations are based on the nutritional requirements of turfgrasses and are not applicable to any other crops.

Turf quality is dependent on many environmental and genetic factors. By following sound agronomic principles, the response to fertilizer will be more fully expressed.

The soil analysis nutrient recommendations and proposed application schedule are integral parts of the total soil nutrient analysis program offered by O.M. Scott & Sons.

* RECOMMENDATIONS											AVERAGES
Code →	1	2	3	4	5	6	7	8	9	10	
Sample Description	**OT1**	**OT2**									
Sulfur Kg/100 m 2		**7.1**									**3.6**
Dolomite Kg/100 m 2											
AG-Lime Kg/100 m 2											
P_2O_5 Gr/100 m 2											
K_2O Gr/100 m 2											
Epsom Salts Gr/100 m 2											
Gypsum Kg/100 m 2											
Zinc Gr/100 m 2	**L**	**OPT**									**OPT**
Manganese Gr/100 m 2	**77.7**	**44.4**									**61.0**
Copper Gr/100 m 2	**L**	**H**									**OPT**
Iron Gr/100 m 2											

RECOMMENDATION NOTES

Nutrients designated as OPT, HI, VH, EX, or dashed, "No recommendation is needed".
Although Phosphorus is high, 0.5 Lbs of P2O5 applied through routine fertilization is not detrimental. However, very high levels (>48 ppm) can tie up iron, manganese, zinc and copper. At these high P levels, application of > 1.0 Lbs P2O5 may result in puffy turf, making 2 to 3 smaller applications will prevent this.
Apply Sulfur to established at no more that 100 Lbs/Acre for Greens, 200 Lbs/Acre for fairways in spring and fall until the total is applied. On fallow soil, incorporate total amount into the upper 6 inches. Soil pH should be monitored in March and August until desired pH is achieved. If turf is mainly Poa Annua, do not apply more than 35 Lbs/Acre in any one year. High rates has the ability to reduce turf stand.
High Calcium and/or Magnesium levels in the soil will slow the acidification action of applied Sulfur. Annual application will be needed to effectively reduce soil pH values.
Single application of epsom salts (MgSO4) not to exceed 10 Lbs/M. Applications should be watered in immediately. If making multiple applications space 30 to 60 days apart (spring and fall is appropriate).
Although no P2O5 is recommended, an application of a "starter" fertilizer to be surface applied at planting time will be beneficial.