Application Name:	ODOT_GeotechReport.mvba
Tested MicroStation Version:	(SELECTseries 3) 08.11.09.655
Tested GEOPAK/OpenRoads Version:	(SELECTseries 4) 08.11.09.789

Application Description

This application is used to generate an Excel file that contains a list of all the soil boring points found in the specified GEOPAK Coordinate Geometry Database (GPK file). The report includes the point name, coordinates, elevation, and the station and offset from the selected GEOPAK Chain.

ODOT CADD Standards Version/Configuration

As of January 2015, ODOT is no longer updating the legacy v8istd CADD Standards. The latest version of the application is delivered with the ODOTcadd Standards for MicroStation (SELECTseries 3). Previously delivered versions of this application contained in the old v8istd folder may not operate exactly as described in this documentation. The ODOTcadd version of the application will work with MicroStation (SELECTseries 2) or (SELECTseries 3) users who are completing existing projects using ODOT's legacy v8istd CADD standards.

- **Running MicroStation SS3 with the ODOTcadd Standards**
  If you are using MicroStation SS3 with the new ODOTcadd standards, the latest version of the application can be accessed from the ODOT menu in MicroStation by selecting **ODOT > Geotechnical > Geotechnical Report**, or by the key-in command listed below.

  vba load ODOT_GeotechnicalReport.mvba; vba run ODOTGTReport

  Note: In the example above the full path to the application is not specified. The MicroStation configuration variable MS_VBASEARCHDIRECTORIES is defined in the ODOTcadd workspace to specify the location of MicroStation VBA applications.

- **Running MicroStation SS2 or SS3 with the legacy v8istd CADD Standards**
  If you are using MicroStation SS2 or SS3 with ODOT's legacy v8istd CADD standards, you can run the latest version of the application from the ODOTcadd folder using the key-in command with the full path to the file similar to the example below:

  vba load i:\ODOTcadd\Standards\vba\ ODOT_GeotechnicalReport.mvba; vba run ODOTGTReport

Application Operation

When the application is accessed, the dialog shown below is opened.
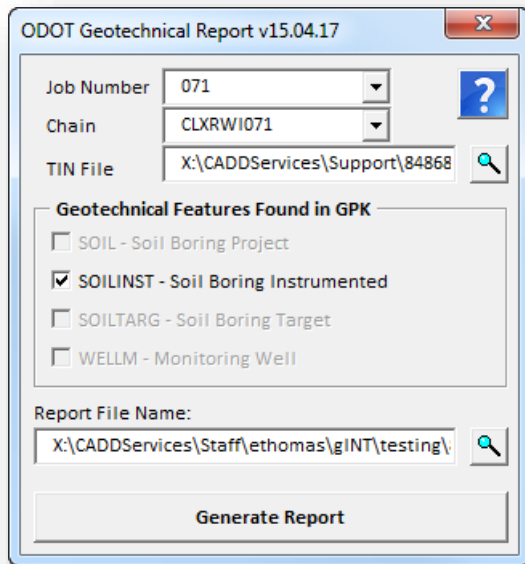
The dialog has the following options:

Job Number
This drop-down menu provides a list of all the GPK files found in the current working directory.

Chain
This drop-down menu provides a list of all the COGO points found in the selected GPK file. The report generated by this application will list the soil boring points with station and offset values relative to the selected chain.

TIN File
The report will include the elevation for each soil boring point. If the point has an elevation defined, the value stored with the point will be included in the report. If the point does not have an elevation value defined, the elevation is read from the **TIN File** selected here.

Geotechnical Features Found in GPK
Points in the GPK file are identified as soil borings by the Feature Code that is assigned to the point. The following feature codes are supported:

SOIL
SOILINST
SOILTARG
WELLM

If a point matching these codes is found in the selected GPK file the item will be activated in the dialog. The user has the option to control which features are included in the report by toggling on/off the desired items.

Report File Name
This field is used to specify the name and path for the Excel file that is generated by the program.

Generate Report

Select his button to generate the report. An example of the Excel file generated by the application is shown below.

	A	B	C	D	E	F	G	H	I	J	K
1	Point Number	Station	Offset	Direction	Elevation	Northing	Easting	Description	Feature Code	Chain	
2	B0391	43301.9845	141.9143	Right	799.4502	679004.895	1809992.484	STA: 433+01.98 OFFSET: 141.9143 ELEV: 799.4502	SOILINST	CLXRWI071	
3	B0401	43502.2377	144.5412	Right	797.9407	679139.9805	1810140.336	STA: 435+02.24 OFFSET: 144.5412 ELEV: 797.9407	SOILINST	CLXRWI071	
4	B0402	43702.4122	141.614	Right	798.0569	679279.063	1810284.33	STA: 437+02.41 OFFSET: 141.6140 ELEV: 798.0569	SOILINST	CLXRWI071	
5	B0411	43903.4469	140.8939	Right	798.6274	679417.1243	1810430.462	STA: 439+03.45 OFFSET: 140.8939 ELEV: 798.6274	SOILINST	CLXRWI071	
6	B0412	44039.6711	156.9099	Left	799.5539	679727.524	1810326.078	STA: 440+39.67 OFFSET: -156.9099 ELEV: 799.5539	SOILINST	CLXRWI071	
7	B0413	44101.404	144.2759	Right	794.28	679550.0882	1810577.156	STA: 441+01.40 OFFSET: 144.2759 ELEV: 794.2800	SOILINST	CLXRWI071	
8	B0421	44244.56	149.6063	Left	796.6494	679862.37	1810480.51	STA: 442+44.56 OFFSET: -149.6063 ELEV: 796.6494	SOILINST	CLXRWI071	
9	B0422	44301.437	143.3746	Right	794.5371	679687.5963	1810722.434	STA: 443+01.44 OFFSET: 143.3746 ELEV: 794.5371	SOILINST	CLXRWI071	
10	B0423	44439.6585	147.129	Left	795.4495	679994.0381	1810624.5	STA: 444+39.66 OFFSET: -147.1290 ELEV: 795.4495	SOILINST	CLXRWI071	
11	B0424	44502.045	145.125	Right	791.3133	679823.5638	1810869.944	STA: 445+02.04 OFFSET: 145.1250 ELEV: 791.3133	SOILINST	CLXRWI071	
12	B0431	44637.8592	143.0948	Left	794.3885	680126.693	1810771.818	STA: 446+37.86 OFFSET: -143.0948 ELEV: 794.3885	SOILINST	CLXRWI071	
13	B0432	44702.7754	143.1424	Right	788.2019	679962.3377	1811014.991	STA: 447+02.78 OFFSET: 143.1424 ELEV: 788.2019	SOILINST	CLXRWI071	
14	B0433	44840.2758	143.8519	Left	790.2222	680265.7266	1810918.932	STA: 448+40.28 OFFSET: -143.8519 ELEV: 790.2222	SOILINST	CLXRWI071	
15	B0434	44902.0264	144.707	Right	785.3662	680097.5124	1811161.385	STA: 449+02.03 OFFSET: 144.7070 ELEV: 785.3662	SOILINST	CLXRWI071	
16	B0441	45050.9906	140.2661	Left	788.4371	680407.27	1811075.07	STA: 450+50.99 OFFSET: -140.2661 ELEV: 788.4371	SOILINST	CLXRWI071	
17	B0442	45100.9374	142.3653	Right	784.2605	680235.3035	1811304.858	STA: 451+00.94 OFFSET: 142.3653 ELEV: 784.2605	SOILINST	CLXRWI071	
18	B0443	45240.1509	142.6991	Left	786.3085	680538.3672	1811211.266	STA: 452+40.15 OFFSET: -142.6991 ELEV: 786.3085	SOILINST	CLXRWI071	
19	B0444	45262.7653	144.1031	Right	783.5412	680345.0677	1811424.344	STA: 452+62.77 OFFSET: 144.1031 ELEV: 783.5412	SOILINST	CLXRWI071	
20	B0445	45412.1572	143.9011	Right	781.7893	680449.6683	1811533.534	STA: 454+12.16 OFFSET: 143.9011 ELEV: 781.7893	SOILINST	CLXRWI071	
21	B0451	45442.7339	147.432	Left	784.4088	680680.0659	1811352.629	STA: 454+42.73 OFFSET: -147.4320 ELEV: 784.4088	SOILINST	CLXRWI071	
22	B0452	45645.974	143.0774	Left	787.3886	680818.16	1811498.395	STA: 456+45.97 OFFSET: -143.0774 ELEV: 787.3886	SOILINST	CLXRWI071	
23	B0461	45846.3765	143.1053	Left	787.434	680959.8016	1811636.718	STA: 458+46.38 OFFSET: -143.1053 ELEV: 787.4340	SOILINST	CLXRWI071	

ODOT_GeotechnicalReport

Contacts

If you have any questions, suggestions, or problem with this application please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

http://www.dot.state.oh.us/Divisions/Engineering/CaddMapping/CADD/Pages/Suggestions.aspx

Acknowledgements

This program was written for the Ohio Department of Transportation, Office of CADD and Mapping Services by Eric Thomas, Eric Thomas Consulting, LLC.

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