North American Tungsten Corporation Ltd.

MACTUNG PROJECT

2006 ENVIRONMENTAL BASELINE STUDIES

**TERRAIN and SURFICIAL GEOLOGY** 

1200163.006

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# **EXECUTIVE SUMMARY**

North American Tungsten Corporation Ltd. (NATCL) is considering the development of a world-class tungsten deposit located in the Yukon near Macmillan Pass, on the border between the Northwest Territories and the Yukon Territory. This terrain study was completed by EBA as part of environmental assessments required for project planning and regulatory submissions leading to MacTung Project approvals and implementation.

This terrain component of the biophysical assessment for the MacTung study area includes the results of a review of previous studies, air photo interpretation, field checking and terrain mapping revisions. Terrain mapping includes definition of polygons with similar terrain attributes such as surficial material type/genesis, surface expression, geomorphological processes (where applicable), drainage, and soil texture.

The MacTung terrain study area straddles the Yukon and NWT border within the Selwyn Mountain Ecoregion of the Taiga Cordillera Ecozone of Canada at an elevation of 1,725 m to 1,800 m a.s.l. The landscape of the study area varies from gentle to flat terrain on the valley floor to steep relief on glacially scoured, upper hillslope bedrock slopes. The terrain mapping study area (about 4,200 ha) for the MacTung project was defined to include the proposed mine production area footprint and options under consideration.

Till (moraine) is the most common surficial material mapped in the study area. Morainal deposit textures ranged from gravelly silty sand to silty sand and most commonly consists of a sand matrix with variable silt and gravel content. Colluvium on upper valley hillslopes is typically coarse, blocky material derived from ongoing erosion of upslope bedrock. Colluvium on lower valley hillslopes ranged from sandy gravel with some silt to silt with some sand.

Sites near the mine access road in the NWT are identified that may be suitable for good granular borrow. Further exploration and testing is required to identify potential granular sources on the Yukon side.

Active geomorphological processes in the study area include rockfall, debris slides, debris flows, avalanches, gully erosion and permafrost processes (e.g., rock glaciers).

Low soil temperatures, short growing season and slow rates of plant reproduction, organic accumulation and decomposition contribute to poorly developed soils. Most of the soils in the study area are Regosols or Brunisols. Some organisols have developed in flat, poorly-drained areas on the valley floor and crysosols exist in some areas where organic layers provide sufficient insulation to allow frozen soil horizons to develop.





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### 1.0 INTRODUCTION

#### 1.1 BACKGROUND

North American Tungsten Corporation Ltd. (NATCL) is considering the development of a world-class tungsten deposit located in the Yukon near Macmillan Pass, on the border between the Northwest Territories and Yukon (Figure 1). The mine site is located in the Selwyn Mountains at an elevation of 1,725 m to 1,800 m a.s.l. The mine site is located 650 km (400 air km) northeast of Whitehorse and is accessible by the Canol Road, a gravel surfaced road to the southern Yukon that is open only during summer months. The mine site is linked to the Canol Road east of Macmillan Pass by a 10 km access road.

NATCL retained EBA to conduct a terrain study in the MacTung Project area (study area). This information is required for project planning and regulatory submissions leading to MacTung project approvals and implementation. The terrain and soils mapping comprised part of the comprehensive environmental baseline study being conducted within the MacTung study area which includes components such meteorology, hydrology, fisheries and aquatic studies, vegetation, archaeology, wildlife studies and water sampling.

#### 2.0 SCOPE

The terrain component of the biophysical assessment for the MacTung study area included project initiation, review of previous studies, study area boundary definition, air photo interpretation, field checking, terrain mapping revisions and preparation of figures and this report.

To initiate the terrain mapping, the project objectives and the local study area boundaries were defined. The following documents were assembled and reviewed:

- Air photos
- Previous relevant reports
- Previous geology mapping and soil descriptions
- Previous geotechnical sub-surface reports

Terrain mapping for the local study area was based on the Guidelines and Standards for Terrain Mapping in B.C. and Terrain Classification System for British Columbia, Version 2 (RIC, 1996 and 1997 resp.)

Terrain Mapping was completed at Terrain Survey Intensity Level D (TSIL D). TSIL D includes field checking of 0 to 25% of polygons by vehicle and flying. The typical objectives of TSIL D are preliminary mapping to produce a terrain map at a scale between 1:20,000 and 1:250,000. Terrain mapping includes creating polygons with similar terrain attributes such as surficial material type/genesis, surface expression, geomorphological processes (where applicable), drainage, and soil texture (where known).



#### 3.0 STUDY AREA

The MacTung study area occurs in both the Yukon and the NWT adjacent to where the North Canol Road crosses the border between the two Territories. The site lies within the Selwyn Mountain Ecoregion of the Taiga Cordillera Ecozone of Canada. The Selwyn Mountain Ecoregion is characterized by high elevation mountain ranges that contain alpine glaciers such as those located on nearby Keele Peak (2,970 m a.s.l.). Elevations range from 745 m a.s.l. to 2,970 m a.s.l.. The Selwyn Mountains give rise to the highest levels of annual precipitation (600-700 mm) in the Yukon outside the Coast Mountains (Yukon Ecoregions Working group 2004). Mean annual temperatures for the region are -5 °C to -8°C, ranging from an average of -20 °C in January to 8 °C in July. The region lies in the discontinuous permafrost zone, however, the study area is likely within the continuous permafrost zone due to its high elevation of between 1,300 m a.s.l. to 2,200 m a.s.l.. Approximate land cover in the Selwyn Mountain Ecoregion is 65% boreal/subalpine coniferous forest, 20% alpine tundra, and 15% rockland (Yukon Ecoregions Working Group 2004). The regional study area has been defined in previous reports and terrain definition for the region is outside the scope of this study.

The terrain mapping study area for the MacTung project was defined to include the probable footprint of the mine production area. This includes areas such as buildings, roads, mill site, tailings ponds and borrow areas. The study area also includes areas within the adjacent valleys and valley sideslopes that could potentially impact the mine footprint area. Initially, the focus was on the Yukon side of the Yukon-NWT border, but the study area was later expanded to include a potential mine production area on the NWT side. The NWT side was the focus of previous studies (AMAX 1981; EBA,1983).

#### 3.1 SITE DESCRIPTION

The project area defined for terrain mapping is about 10 km by 4 km (40 km<sup>2</sup>), with the proposed mine site near the centre (Figure 2). Within the terrain study area, valley bottoms measure between 1,160 m a.s.l. and 1,400 m a.s.l. Alpine peaks range from 1,800 m a.s.l. to 2,200 m a.s.l. Terrain is highly variable in the study area due to depositional and erosional differences and variable permafrost conditions. Valley bottoms tend to be flat to gentle gradient and valley sideslopes are steep with much open bedrock.

The Yukon / NWT border is located on the continental divide. The Yukon side is within the Yukon River watershed which drains to the Pacific Ocean. The NWT side is within the Mackenzie River watershed which drains to the Arctic Ocean.

## 3.2 GEOMORPHOLOGY AND GEOLOGY

The landscape of the study area varies from gentle to flat terrain on the valley floor to steep relief on glacially scoured, upper hillslope bedrock slopes. The area landscape is the result of montaine glaciation that scoured valley hillslopes, creating steep rock headwalls with associated colluvial slopes below. On the lower valley hillslopes and floor, morainal deposits form lower gradient slopes and low relief irregular terrain.



The general site geology and topography have been extensively described and documented in previous reports. The site is located within the Selwyn Mountain Range, which is characterized by extreme relief with pointed summits, steep sideslopes and narrow valleys. Evidence of glaciation is widespread. The lower valley areas were affected by continental ice sheets which deposited varying thicknesses of till, while the upper elevations have been affected more recently by alpine glaciation. Lower valley slopes are typically covered in colluvium due to erosion processes, landslides and surface flowslides. In the immediate vicinity of the mine, bedrock geology consists of laminated shales and phyllites. These were intruded by granitic blocks which form the higher, more competent peaks.

The proposed mine site has elevations varying from 1,524 m (5,000 ft) at the bottom of Dale Creek valley to about 1,890 m (6,200 ft) near the proposed mill site. The Selwyn Mountains are very rugged, with sharp peaks and steep side slopes. The valleys tend to be narrow and slightly rounded. The higher areas of the mountains have little or no surficial soils while the lower slopes and valley bottoms are covered with thin deposits of residual soils and glacial tills. Kames and eskers deposits are visible in the Dale Creek valley and extend eastward into the Tsichu River valley.

Due to the generally weak and fissile nature of the parent rocks in the area, which are generally highly schistostic metamorphic rocks, most granular deposits are of poor quality. Granular material suitable for concrete aggregate has not been reported near the proposed plant area. However, at least one source of talus gravel that may be suitable for road surfacing was identified on the south side of Dale Creek near the existing bridge (Geocon1983 cited in Golder Associates 1981). Initial indications are that concrete aggregates may have to be obtained by crushing local competent bedrock.

#### 4.0 METHODS

## 4.1 **PREVIOUS REPORTS**

According to AMAX (circa 1983), weather studies were first undertaken for the area in 1968 with environmental and socio-economic studies first conducted in 1973. Of the many studies completed since, four studies that provide a background of the terrain and geology of the area are:

- Golder Associates. 1981. Report to AMAX Northwest Mining Company Ltd. on Geotechnical Investigations for Tailing Disposal at MacTung
- Geocon Inc. 1983. Conceptual Geotechnical Evaluation. Proposed Mine. Report.
- EBA Engineering Consultants. 1983. Geotechnical Evaluation. Proposed MacTung Mine, MacMillan Pass, Yukon, Northwest Territories.
- AMAX Northwest Mining Company Limited. 1982. Initial Environmental Evaluation of the MacTung Project Yukon and Northwest Territories.



Kershaw, G.P. and Kershaw, L.J. 1983. Geomorphology and Vegetation of the MacTung Study Area, Yukon/N.W.T. Prepared for AMAX Northwest Mining Co. Ltd., Vancouver. 85 p.

Kershaw (1983) provides a reconnaissance level interpretation of the terrain and surficial geology within the local study area, covering about 450 km<sup>2</sup>.

# 4.2 TERRAIN CLASSIFICATION SYSTEM

The Terrain Classification System is designed for the classification of surficial materials, landforms and geomorphological processes. It has been specifically developed to provide an inventory of the terrain features in the landscape and to show their distribution, extent and location. The system is scale independent and provides base data applicable for a wide range of natural resource applications including planning, management, effects assessment and research. The data are conveyed in map form by the use of terrain symbols and is conducive to computer digital storage, management and processing.

The process results in the production of a terrain map that shows the distribution of surficial (Quaternary) deposits and related landforms. It also provides information about present day geomorphological processes such as debris slides, permafrost and erosion.

Terrain mapping consists of project planning, review of previous reports and geology, air photo interpretation and initial classification of terrain, field-checking, post-field terrain revisions and mapping. The methods and approaches for each phase are discussed below.

Project planning and initial review included defining the objectives and the purpose of the work, a detailed literature review of prior geology and terrain classification for the study area and defining the survey intensity. Level D survey intensity (RIC 1996) was determined to be adequate for the 22,500 hectare local study area. A Level D survey intensity protocol includes investigation of up to 25% of the terrain polygons.

Terrain mapping was completed by Jack Dennett, P.Geo. (BC). Field checking was conducted by Jack Dennett and Glenn Rudman, M.Sc. between July 4<sup>th</sup> and July 10<sup>th</sup> 2006. Representative terrain polygons were accessed mostly on foot or by road with some assistance by helicopter to access remote areas. Terrain descriptions and data from hand excavated soil pits were recorded on standardized field form. Mapping of terrain was based on the Terrain Classification System for British Columbia (RIC 1997). All plot positions were recorded using a Garmin 76 Global Positioning System with accuracy of between 6 to 20 m.

Terrain field checking included observations at 42 field stations with additional overview mapping from the air and strategic view sites. A total of 145 polygons were mapped in the terrain study area. Field checking intensity was 24%. This meets the requirements for Terrain Survey Intensity Level D terrain mapping.



Air photo interpretation of the terrain was completed on 1:30,000 scale, black and white air photographs flown in July 1996. Specifically, the air photographs used to cover the local study area were Flight Line A28283, photographs 49 to 53, and 24 to 28.

Terrain maps were completed using ArcGIS version 9.1. Reconciliation of all polygons was completed to ensure quality assurance and control.

#### 5.0 RESULTS

# 5.1 TERRAIN CLASSIFICATION INVENTORY

Terrain mapping was completed within the terrain study area, which includes the main valley and hillslopes on each side of the NWT/Yukon border. The study area extends into the Yukon about 7 km west of the border and about 4.5 km east into the NWT. During the course of the study, 145 terrain polygons were delineated within a study area covering an area of about 4200 ha. A statistical summary of the four general terrain units classified in the area (colluvium, till, fluvial and bedrock) is presented on Table 5.1.

TABLE 5.1 TERRAIN CLASSIFICATION INVENTORY FOR THE MACTUNG AREA, YUKON/NWT										
Surficial Material Type	Symbol	Number of Polygons	Percent of Total							
Colluvium	С	44	30							
Till (moraine)	М	59	41							
Fluvial	A	1	1							
Bedrock	R	41	28							
	TOTAL	145	100							

#### 5.2 PERMAFROST

The area falls within the discontinuous permafrost zone. However, the study area is within a high elevation alpine zone with a low mean annual temperature (-7.7°C to -8.5°C) and the area climate is likely similar to conditions found in the continuous permafrost zone. Continuous permafrost terrain is generally expected wherever the mean annual air temperature is less than about -5°C. Permafrost was not intersected in any of the shallow hand excavated pits evaluated during the 2006 terrain field program. However, permafrost was intersected at some of the boreholes and testpits advanced on the NWT side in 1980 (Golder Associates 1981).



#### 5.3 SURFICIAL MATERIALS

Colluvium on upper valley hillslopes is typically coarse, blocky material derived from ongoing erosion of upslope bedrock. Colluvium on lower valley hillslopes ranged from sandy gravel with some silt to silt with some sand. Colluvium in the valley bottom is generally similar to the till texture.

Morainal deposit texture ranged from gravelly silty sand to silty sand and most commonly consists of a sand matrix with variable silt and gravel content. Hand excavated testpits on the Yukon side of the study area indicated generally similar soil textures to those found in testpits and boreholes reported in previous reports from the NWT side.

Fluvial materials have accumulated in some low gradient stream channel areas on the valley floor. Soil textures of these fluvial materials are expected to have increased silt and sand content.

Previous reports identify sites on the NWT side that may be suitable for good granular borrow (Golder Associates 1981). Boreholes 80-17A and 80-18 report 6.0 m thick intersections of sand and gravel. Testpits 79-9 and 79-10 report intersections of up to 2.7 m sand and gravel, and boreholes 75-8 and 75-9 report 3.8 m to 5.6 m sand and gravel (Figure 3). Further exploration and testing is required to identify potential granular sources on the Yukon side.

#### 5.4 TERRAIN DESCRIPTION

The bedrock slopes of the upper valley walls and cirques are typically steep (greater than 70%) and moderately steep (50 to 70%). They are rapidly drained. Snow accumulations in the area are heavy and the moderately steep to steep slopes are likely subject to avalanching. Rockfall is the primary erosional process on these slopes. A possible relic debris slide about 20 ha in area was mapped on a north valley hillslope about 6 km west of the Yukon / NWT border.

Colluvium most commonly occurs on moderately steep (50-70%) to moderate (27-49%) gradient, well drained blocky talus slopes below bedrock headwalls. Colluvium on lower gradient (moderate to gentle) lower valley slopes is more weathered and is typically covered by a thin organic horizon with ground vegetation. Lower valley slopes are typically moderately well to moderately drained. Colluvial fans are abundant on the lower reaches of tributary streams, where colluvium has been deposited from debris flows and alluvial processes. Fans are typically imperfectly drained near the toe.

Till deposits in the study area may be the result of basal deposits, lateral and terminal moraines and other intra-glacial deposits formed during periodic glacial advance and retreat throughout deglaciation. Very compact soils reported at test sites on the NWT side (Golder Associaties 1981) may be basal tills. Loose material, forming ridges and hummocks on the valley floor, are probably from intra-glacial deposition. Recent fluvial deposits on the flat areas of the valley floor have formed silt rich plains



#### 5.5 GEOMORPHOLOGICAL PROCESSES

Six geomorphological processes, rockfall (-Rb), debris slides (-Rs), debris flows (-Rd), avalanches (-A), gully erosion (-V) and rock glaciers (-Z), are active in the study area.

Rockfall involves the release of relatively small masses of rock (e.g., a single block or a few cubic metres) and movement downslope by freefall, rolling and bouncing. This is the most common process in the area and results in the formation of extensive talus slopes.

Debris slides occur when a mass of glacial drift or colluvium becomes detached from a hillside and moves rapidly downslope by sliding along a shear plane. Debris slides are initiated on steep hillsides by the sliding of weathered till and/or colluvium along a shear plane that coincides with the contact between weathered till and unweathered till, or between colluvium and till, or between any of these materials and bedrock. A possible relic debris slide about 10 ha in area was mapped on a north valley hillslope about 6 km west of the Yukon / NWT border.

A debris flow is the rapid flow of a mass of viscous material, consisting of mud, sand, stones and/or organic debris. A debris flow is often initiated when a debris slide enters a stream channel and may move downslope for several hundred metres or more. They are a significant source of stream sediment and deposition on colluvial fans in lower reach runout zones. Small, periodic debris flows are probably an ongoing process within valley sideslope stream channels and contribute to the colluvial fan deposits mapped in the study area.

Avalanches are rapid slides or flows of snow. Rocky debris and vegetative material are commonly transported by the snow. Avalanches probably play a part in downslope transport of some colluvial material in the study area

Gullies are small ravines with v-shaped profiles that form in drift and bedrock. In the terrain study area gullies on the valley sideslopes are mostly active, with most erosion probably taking place during spring run-off. The presence of gullies indicates erodable material, such as till, colluvium and weathered bedrock.

Rock glaciers are typically thick talus deposits with an ice-rich core and have a lobate, tongue-shaped form. They can form where deep blocky colluvium over permafrost receives sub-surface flow from an upslope basin. Rock glaciers are usually active, moving downslope at a very slow rate, and have a moderately steep, active escarpment on the downslope face. Numerous rock glaciers are mapped in the study area.

## 5.6 SOILS

Terrain field checking indicated the lack of well developed soil profiles, which is typical of arctic alpine environments. Soils are absent on the upper, steep to moderately steep slopes where erosional processes are active. Low soil temperatures, short growing season and slow rates of plant reproduction, organic accumulation and decomposition contribute to poorly developed soils. Most of the soils in the study area are Regosols or Brunisols. Regosols



occur at high elevations in association with till deposits and Brunisols generally occur at lower elevations in well drained locations. Organisols have developed in flat, poorly drained areas on the valley floor. Crysosols exist in some areas where organic layers provide sufficient insulation to allow frozen soil horizons to develop. Palsas – hummocks of frozen peat with ice-rich cores – were mapped on the valley floor about 2.6 km east of the Yukon/NWT border.

#### 6.0 DISCUSSION AND CONCLUSIONS

The results of the terrain mapping characterize a landscape typical of northern alpine mountainous terrain. Surficial material ranges from coarse textured colluvial talus on middle to upper slopes to sandy gravelly silt colluvium and till on lower slopes.

Much of the colluvium and till should be suitable as general fill. Previous reports identify sites on the NWT side that may be suitable for good granular borrow as sand and gravel intersections between 2.7 m and 6.0 m were located.

Hand excavated testpits on the Yukon side of the study area indicated generally similar soil textures to those found in testpits and boreholes reported in previous reports from the NWT side.

Geomorphological processes identified in the study area include rockfall, debris slides, debris flows, avalanches, gully erosion and permafrost processes (e.g., rock glaciers). Colluvium and bedrock dominate the upper valley hillslopes and moraine is the common soil cover on the lower valley hillslopes and main valley floor.

Although the area is within the zone of discontinuous permafrost, continuous permafrost is more likely to occur in the high elevation alpine climate. Permafrost features are mapped in the area.

Most of the soils in the study area are Regosols or Brunisols. Organisols have developed in flat, poorly drained areas on the valley floor. Crysosols have developed in some areas where organic layers provide sufficient insulation for frozen soil horizons to develop.

#### 7.0 CLOSURE

The information and analyses contained in this report and maps are based on the results of previous reports, air photograph interpretation, current understanding of regional terrain and geology, and on limited observations of land-surface conditions. In most of the study area, subsurface conditions (e.g., characteristics of subsurface materials and subsurface hydrologic conditions) are interpreted from surface observations or air photo interpretation with only reconnaissance scale field checking.

EBA is pleased to present North American Tungsten Corporation Ltd. with this Terrain Study report for the MacTung project. The report has been produced to aid project planning and future regulatory submissions leading to MacTung project approvals and



implementation. We are confident that the data and associated information presented in the report will assist in supporting this objective.

Further information on the use of this report is presented in the attached General Conditions, which form a part of the report.

Respectfully submitted, EBA Engineering Consultants Ltd.

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# APPENDIX

APPENDIX A: PHOTOS





Photo 1 MacTung July 2006. Soil pit on colluvial, mid-valley slope



Photo 2 MacTung July 2006. Excavation of soil testpit on lower valley hill slope





Photo 3 MacTung July 2006. Valley floor and steep sideslopes characteristic of the study area



Photo 4 MacTung July 2006. Moderately steep talus slopes with periglacial processes (CK-Z)





Photo 5 MacTung July 2006. Rock glacier (Cjk-Z) near mine access road on south valley hillslope, located about four kilometers east of the Yukon NWT border



Photo 6 MacTung July 2006. Common till (moraine) texture on valley floor





Photo 7 MacTung July 2006. View east of morainal terrain on valley floor at the eastern extent of the terrain study area



Photo 8 MacTung July 2006. Moderately steep to steep valley sideslopes in the NWT side of the terrain study area.





Photo 9 MacTung July 2006. Gullying (-V) through thick till deposits on south-facing valley



Photo 10 MacTung July 2006. Palsas (ice-core peat) in thick organic deposits on valley floor in NWT side of terrain study area.



# APPENDIX

APPENDIX B: FIELD NOTES



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MATERIAL DE SCRIPTION       MATERIAL DE SCRIPTION       Solt CHARACTERISTICS       LFH HORIZON: thickness       Bandor C horizon mothers: below depth of       Bandor C periopenties: painties: painties	SUPFICIALIWATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN DISCONTACT: sharp or gradational; horizontal or wavy	bns,     bns,       CONTACT: sharp or gradational; horizontal or wavy       Dominicational; horizontal or wavy       Data       Data       Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATIFICATION     MATRIX TEXTURE       well mod well mod. weak (nassive)     5 5:D/m 2       % CLASTS:     7 5:D/m 2       % CLASTS:     7 5:D/m 2	high mod slight foor lutthouced of coarse Fragments weatherpays of clasticsteedbrock blk. 15, thu, pry it is weatherpays of classicsteedbrock is a blk. 15, thu, pry it is a ble book if is a ble book if is a ble book if is a ble book is a ble book if is a ble	
PROJECT NO. (+area)     DATE     DATE     AIR PHOTO NO.       1200163; ould     3 July Ub     AIR PHOTO NO.       SITE DESCRIPTION     3 July Ub       SITE DESCRIPTION	Where the streposition, indicate orientation and scale) Why they are the streposition, internation and scale and the streposition of the streposit	-NB - one sub-raunded cobble noted (My)	SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) concave ponvex straight concave convex straight HILLSLOPE CONFIG. DOM.VEG. & MOISTURE INDICATOR PLANTS uni itr fhum ben ter rid gul sca	BUDDEHS BLOCKS BEPROCKOUTCAPP HYDRO. CHAR. are s o more to More to Mun 73:55 in 5 addl SAMPLES	

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(Jul) CLAST. ROUNDNESS: A SA SR R WR omplete the following for unweathered surface material if possible, otherwise use B horizon (weathered) BLAORIZON: thickness cm absent Bc Bt Bth Bg Bgi Bm high mod slight a (c) s o WEATHERING OF CLASTS/BEDROCK BOULDERS OXIDATION B and/or C pedogenic concentration: top at \_\_\_\_\_\_cm; base at \_\_\_\_\_ cm REPRESENTS POLYGON? SAND trace of というとちちょう hoderate. high ORIGIN F) 1. 2 3 D ADD. NOTES IN FIELD BOOK? high mod slight non gravelly sprip MATERIAL DESCRIPTION lone OVERALL TEXTURE INDURATION 2 MATRIX TEXTURE  $\mathcal{O} \circ \circ \circ$ COBBLES CONTACT: sharp or gradational; horizontal or wavy wavy CONSOLIDATION COHESION LFH HORIZON: thickness gradational; horizontal (a) o s o Well. mod. well mod. weak (massive) THICKNESS (m) PEBBLES TERRAIN UNIT SYMBOL for vicinity of site 3 and/or C horizon mottles: below depth of LITHOLOGY OF COARSE FRAGMENTS ome abundant soil drainage: r 🎯 m i p (single states) SOIL CHARACTERISTICS SURFICIAL MATERIALS. Sug bns 35Cb graphitic shells; 5 CLAST. ABUNDANCE BY SIZE absent CONTACT: sharp STRATIG, UNIT ELEVATION (1) A. -NB One 0.5m boulder of sub-model quissils rade (M) DOM. VEG. & MOISTURE INDICATOR PLANTS HYDRO, CHAR. m (cm) 58 SLOPE CONFIG. (ACROSS SLOPE) concave convex straight SKETCH (X-SEC. TO SHOW SITE ROSTHON; INDICATE ORIENTATION AND SCALE) PHOTOS roll no. description (2) 14:27 - 51900 with R well behind SECTION HT/PIT DEPTH Stres lot in BEDROCK OUTCROP Typical Min/max AIR PHOTO NO. ŝ % 。 Brope SITE DESCRIPTION LOUANN' 5071 colour: black 1200167.006 30 why do 350 N SITE DESCRIPTION (soil pl.) road cut, etc.) BLOCKS HILLSLOPE CONFIG. SLOPE CONFIG. (DOWN SLOPE) ASPECT « concave convex straight DATE untreten PROJECT NO. (Harea) dry Regosol BOULDERS 20-3 SITE NO. SAMPLES

MATERIAL DESCRIPTION       SOIL CHARACTERISTICS       SOIL CHARACTERISTICS       LFH HORIZON: thickness       LFH HORIZON: thickness       absent       B and/or C horizon motiles: balow depth of       B and/or C horizon motiles: balow depth of       B and/or C horizon motiles: balow depth of       B and/or C horizon motiles: balow depth of	SOIL DRAINAGE: r (m) m 1 p v SUBFICIAL MATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN Brave (4 SAM) C	CONTACT: sharp or gradational; horizontal or wavy brs. CONTACT: sharp or gradational; horizontal or wavy bns	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)       BEDDING/STBATIFICATION       Well mod. well mod. well mod. weak massive       % CLASTS:       % CLASTS:       30       % CLASTS:       30       % SLASTS:       30       % SLASTS:       8       % CLASTS:       30       % SLASTS:       30       % SLASTS:	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION INFO SIGNT (A) high mad slight (
			<ul> <li>*</li> <li>*</li> <li>*</li> <li>*</li> </ul>	
		<b>2</b> 2		
Alf PHOTO NO. SGRIPTION SLOPE % ELEVATION (2) ft. Typical (Michark / L/C) E.ELVATION (2) ft. Lot (3) 3 cm	NI: 70 15 99 7 NDICATE OFIENTATION AND SCALE)		SLOPE CONFIG. (ACROSS SLOPE) concave (convex) straight DOM. VEG. & MOISTURE INDICATOR PLANTS G. ROUS ( COMPSIME INDICATOR PLANTS	BEDROCK OUTCHOP HYDRO CHAR. - 4/8/10/WS Carhbya DICHUAL

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MATTERIAL DESCRIPTION	SOLL CHARACTERISTICS	LFH HORIZON: thickness 2 cm absent BHORIZON: thickness cm absent absent Bc Bf Bh Bg Bgj Bm	B and/or C horizon mottles: below depth ofcm B and/or C pedogenic concentration: absentbme abundant top atcm ponderate high	SOIL DĤAINAGE: r 🔊 m i p v	STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	pres gravely sond M(C?)	CONTACT: sharp or gradational; honizonial or wavy	bis	CONTACT: sharp or gradational; horizontal or wavy	Pis	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING(STRATIFICATION MATRIX TEXTURE well mod. well mod. weak (massive) Same, Same (trac.) 54 H	% CLASTS: 25 CLAST. ROUNDNESS: A (SA) SH R WR	CLAST ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE (a) c s o (a) c s o a c (s) o	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION INGh mod slight from high mod slight from high mod slight from	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK 9241, shoule 17	TERRAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? YES NO	Egs 1410 Vegetation: GR	
		-				. · · · · · · · · · · · · · · · · · · ·	•				•			•			· · · · · · · · · · · · · · · · · · ·		
PROJECT NO. (+area) DATE AIR PHOTO NO.	$\sum_{n=1}^{\infty} \frac{1}{n} \sum_{i=1}^{n} \frac{1}{n} \sum_{i$	ITE NO. ASPECT . SLOPE . C. ELEVATION (m.) th	JU-D DWErfells/Play Typical MINMAX 1624 SITE DESCRIPTION (Soli pit, yoad out, alc.) SECTION HT. PIT DEPTH m cm	SKETCH (X-SEC. TO SHOW SITE POSITION, INDICATE OHIENTATION AND SCALE)	medium prom-gray colour	- pit at small store boil (MF)	- montane till	- Reposal - Mircle chall (rustr II) de in maintener	d'an in class with hidd to carbon oddur.		· · · · · · · · · · · · · · · · · · ·	SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave convex straight	uni (int) hum ben ter rid gui sca akip () to grow a control prants	BOULDERS BLOCKS BEDROCK OUTCROP HYDRO. CHAR.	PHOTOS roll no. description	SAMPLES		

MATERIAL DESCRIPTION	SOIL CHARACTERISTICS LFH HORIZON: thickness 2 cm absent B HORIZON: thickness cm	B and/or C hortzon mottles: below depth of B and/or C pedogenic concentration: (absept) some abundant top at mone moderate high	SOLL DRAINAGE: r 🖉 I. P V SURFICIAL MATERIALS	SIMAULO. DUI IMUCANESS (M) OVERALLIEXIUME UNIGIN AMA DIA VELLY SAMA	CONTACT: sharp or gradiational; horizontal or wavy ?	i 2 Ens) M	CONTACT: sharp or gradational; horizontal or wavy	Complete the following for unweathered surface material if possible, otherwise use B hortzon (weathered) BEDDING/STRATIFICATION MATRIX TEXTURE	Well mod. Welk mod. Weak massive) Sond SGN-LSI/T % CLASTS: 25 CLAST. ROUNDNESS A SA R WR	CLAST. ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE (a) c s o a (c) s o C c s o	CONSOLIDATION COHESION INDURATION OXIDATION Ingh mod slight from high mod slight from high mod slight from	DINCLE Shelle	TEARAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? (YES) NO $_{0.5}$ CD (ML(2) ADD. NOTES IN FIELD BOOK? (YES) NO V LAUXATION GP	
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	B	LEEVATION (m) II. 1645 H (m) an	SCALE)	. <u></u>	-	· · · · · · · · · · · · · · · · · · ·			ACROSS SLOPE) wax (straight)	E INDICATOR PLANTS	HYDRO. CHAR.			and the second se
AIR PHOTO NO.		SLOPE C LEEVATION (C) II. Vypeal Migmax 1645 SECTION HIZPHT C) OM E: 444 (524	N: 70( b 463 DATE ORIENTATION AND SCALE)	· · · · · · · · · · · · · · · · · · ·			· · · · · · ·		SLOPE CONFIG. (ACROSS SLOPE) concave convex (straight)	DOM. VEG. & MOISTURE INDICATOR PLANTS	BEDROCK OUTCROP HYDRO. CHAR.			
	SITE DESCRIPTION	ASPECT ASPECT BLOPE CON ELEWTION (CD II.) SW 1900al Mightias 1645 Philped out, atc.) SECTION HT/PHT DEPTH (CD on	N: 701 b463 W SITE POSITION; INDICATE ORIENTATION AND SCALE)						DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) ex straight concave convex (straight)	COVERS DOM, VEG, & MOISTURE INDICATOR PLANTS Is rid gui sca	BLOCKS BEDROCK OUTCROP HYDRO. CHAR.	scription		
PROJECT NO. (+area) DATE AIR PHOTO NO.	I 1/20016 3.006 3 July 06 SITE DESCRIPTION	SITE DESCRIPTION (Scipit, Dead out, alc.) ECTION HILPET DEPTH OP on EXTERDED SCIPIT, Dead out, alc.) ECTION HILPET DEPTH OP on	SKETCH (X-SEC TO SHOW SITE POSITION, INDICATE OFIENTATION AND SCALE)	aufriter	- Color				SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) concave convex straight concave convex (straight)	HILLSLOPE CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS uni (irr) hum ben ter rid gul sca	MARCAD BLOCKS BEDROCK OUTCROP HYDRO. CHAR. a 60 a 66 o a 20 m. J 15+	PHOTOS roll no. description	SAMPLES	

MATERIAL DESCRIPTION	SOIL CHARACTERISTICS LFH HORIZON: thickness 3 cm absent B HORIZON: thickness cm ubsent BC Bf BH Bg Bgl Bm	B and/or C horizon motiles: below depth ofCm B and/or C pedogenic concentration: top atCm; base atCm top atCm; base atCm	SOIL DRÁINAGE: r w m i p v	STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	pue	CONTACT: sharp or gradational; horizontial or wavy	pus	CONTACT: sharp or gradational; horizontal or wavy	pus	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATIFICATON MATRIX TEXTURE well mod. weak massive	% CLASTS: CLAST, ROUNDNESS: A SA SA R WR	CLAST ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE a s s o a c s o a c s o	CONSOLIDATION COHESION INDURATION OXIDATION high mod sight non high mod slight non high mod slight non	Dack Shinks (9)	TERRAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? YES NO	AT WINNER AND AL
						•					· · · · · · · · · · · · · · · · · · ·			•	· ·		
AIR PHOTO NO.	ESCRIPTION SCRIPTION SOPE * % Elevator for fi	Typical Minmax 1676 SECTION HT/PIT DEPTH m om E: 0441603	NDICATE ORIENTATION AND SCALE)	che ().	autera	t-ar	- Hail		se some potecel molenne		SLOPE CONFIG. (ACROSS SLOPE)	concave convex straight	DOM. VEG. & MOISTURE INDICATOR PLANTS	BEDROCK OUTCHOP HYDRO. CHAR. a < (5) b Chyd	We has been and citizen		
PROJECT NO. (+area) DATE	I A UNIO X UNA JOURY UN	$\frac{\sqrt{2}-7}{\sin 2}$ site description (soil pit, road cut, etc.)	SKETCH (X-SEC. TO SHOW SITE POSITION: II					Silver-	-hillst ge sure may be	· · · ·	SLOPE CONFIG. (DOWN SLOPE)	concave convex straight	HILLSLOPE CONFIG. Uni in hum ben ter rid gul sca	BOULDERS BLOOKS a c s o a c (g o	PHOTOS roll no. description	SAMPLES	

MARTEDIAL DESCEDIDATION	SOIL CHARACTERISTICS	LFH HORIZON: thickness, cm absert BHORIZON: thickness cm absert Busen/Bc Bf Bh Big Bm	B and/or C horizon mottles: below depth ofm P and/or C pedogenic concentration: top atm top atm	ábsent some abundant none) moderate high SOIL-DRAINAGK r w m i p v	SUBFICIALMATERIACS STARTIG, UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	(sud	CONTACT: sharp or gradational; horizontal or wavy	bhs	CONTACT: sharp or gradational; horizontal or wavy	bhs	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	well mod. weak massive MATRIX TEXTURE	CLASTS: 100 CLAST. ROUNDNESS: A SA R WR	CLAST ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE (a) c s (a) c s c (a) c s c	CONSOLIDATION     COHESION     INDURATION     OXIDATION       high mod slight (ron)     high mod slight (ron)     high mod slight (ron)     high mod slight (ron)	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK	TERRAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? YES NO R. U.J. 5 1978 ADD. NOTES IN FIELD BOOK? YES NO	Cle d'ennight vegetation: Ce
		j j					· · · · · · · · · · · · · · · · · · ·	- - - -		· ·		· · ·						
PROJECT NO. (Harea) DATE AIR PHOTO NO.	(200/63.006 3 July 06 600	SITE DESCRIPTION SITE NO. ASPECT • SLOPE • (37) / ELEVATION M. ft.	UD-B Typical Minimax SITE DESCRIPTION (sout print (road out) elec) SECTION HT.PTT DEPTH m cm	N: 70/6600	SKETCH (X-SEC. TO SHOW SITE POSITION, INDICATE OPHENTATION AND SCALE)	R likely ice vice talve		talus				SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave convex straight concave convex straight	(un) III hum ben ter rid gui son bow, sone with ow prover and	BOULDERS BLOCKS BEDROCK OUTCHOP HYDRO, CHAR.	PHOTOS roll no. description 17:55 - John Manuelyse	SAMPLES	

ŀ high mod slight (non CLAST. ROUNDNESS: A SA SR R WR B HORIZON: thickness cm absent Bt Bt Bth Bth Bg Bgj Bm complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) 퉁 BOULDERS OXIDATION 8080 WEATHERING OF CLASTS/BEDROCK g B and/or C pedogenic concentration: 5 g Kes ) none) moderate 'high c Ŋ ORIGIN REPRESENTS POLYGON? (YES) \_cm; base at\_ F 1 2 3 D MATRIX TEXTURE ADD. NOTES IN FIELD BOOK? くころちょうろ high mod slight for silly scurl OVERALL TEXTURE TTERIAL DESCRIPTIO INDURATION a c s o COBBLES top at\_\_\_ AS X ~ CONTACT: (sharp/or gradational; horizontal or wavy CONTACT: sharp or gradational; horizontal or wavy CONSOLIDATION COHESION LFH HORIZON: thickness 180 cm absent bus 1. 80 THICKNESS (m) BEDDING/STRATIFICATION PEBBLES 8 C S O B and/or C horizon mottles: below depth of TERRAIN UNIT SYMPOL for vicinity of site LITHOLOGY OF COARSE FRAGMENTS absent some abundant 900 / 22 / d0 9 SOIL DRAINAGE: r w m r p 🕅 Ca SOIL CHARACTERISTICS suq CLAST. ABUNDANCE BY SIZE Shall STRATIG, UNIT % CLASTS: R

end of hole -> remere 1,8m ELEVATION (m) #. DOM, VEG. & MOISTURE INDICATOR PLANTS X m WA SECTION HT/PILDEPTH m (m) 180 HYDRO, CHAR もないですく SLOPE CONFIG. (ACROSS STOPE) - nervou poly for in @1.82 A Vally budden in @1.82 M - 25m 50 is mined soil (gravely hole) at a Krach 1 xtor - interected mineral sich at full concave convex straight SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) wellowd grower BEDROCK OUTCROP Typical MIn/max N: 7016181 AIR PHOTO NO. SITE DESCRIPTION SLOPE ° % PROJECT NO (+4164) | DATE auga stem burgh - medium bluegrey si a a a a uni)rr hum ben ter rid gul sca SITE DESCRIPTION (soli plt, road cut, etc.) SLOPE CONFIG. (DOWN, SLOPE) BLOCKS 「しやし」 concave convex straight ASPECT ° HILLSLOPE CONFIG. - untrozer PHOTOS roll no. description HAND AWAY JD - 9 BOULDERS a c s d SAMPLES

(`~high mod slight (non) CLAST. ROUNDNESS: A SA SH R WR Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) BHORIZON: thickness cm absent Bc Bt Bh Bih Bg Bgj Bm a©s o ŝ BOULDERS OXIDATION B and/or C pedogenic concentration: WEATHERING OF CLASTS/BEDROCK ADD. NOTES IN FIELD BOOK? (ES) NO  $\geq$ REPRESENTS POLYGON? (YES) NO Vegetation: CR none moderate high sand, trace sift ORIGIN \_cm; base at growelly and trace silt high mod slight non WATERIAL DESCRIPTION OVERALL TEXTURE MATRIX TEXTURE INDURATION a) c s o COBBLES top at black sholl matrix" + graphics, wavy CONTACT: sharp or gradational; horizontal or wavy g Ê, high mod slight fon high mod slight non cm absent horizontal myta sedinent toulders a so THICKNESS (m) BEDDING/STRATIFICATION COHESION PEBBLES B and/or C horizon mottles: below depth of TERRAIN UNIT SYMBOL for violatity of site ITHOLOGY OF COARSE FRAGMENTS SOIL DRÁINAGE: r 😡 m 1 p v gradationat; LFH HORIZON: thickness 5 SOIL CHARACTERISTICS ( <u></u> suq å TERIA 50 gsMr CONTACT: sharp or CLAST. ABUNDANCE BY SIZE CONSOLIDATION STRATIG, UNIT % CLASTS: Ş. 2.60 ELEVATION (m.) ft. DOM, VEG. & MOISTURE INDICATOR PLANTS нурво. снав. SLOPE CONFIG. (ACROSS SLOPE) Jan V 142 concave convex atraight SECTION HTJPIT DEPTH (m) cm 18:36 - Mod wy w/ GR Filing P.7 SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE OFIENTATION AND SCALE) BEDROCK OUTCROP Typical Min/max - N: 7016011 AIR PHOTO NO. SCRIPTION LOCATION 3 July 06 ~ FLAS BLOCKS unt irr hum ben ter Ad gut sca SITE DESCRIPTION (soil pit, foad cut/ etc.) E H SLOPE CONFIG. (DOWN SLOPE) ASPECT ° concave convey straight HILLSLOPE CONFIG. description DATE PROJECT NO. (+area) 1200163,006 ģ 01-01-ရ င (၆) ၀ BOULDERS PHOTOS roll SAMPLES SITE NO.

MATERIAL DESCRIPTION soil characteristics LFH HORZON: thickness O cm absent B HORIZON: thickness 20 cm absent Bo Bf Bih Ba Bol Bm	B and/or C horizon motites: below depth ofm B and/or C pedogenic concentration: absent some abundant top atm fore moderate high	SURFICIALI MATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN bis 352 M CONTACT: sharp or gradational; horizontal or wavy	bins CONTACT: sharp or gradational; horizontal or wavy bins Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATTIFICATIONS weil mod. weak (massive) MATRIX TEXTURE % CLASTS: A SA SA R WR % CLASTS: A CLAST. ROUNDNESS: A SA SA R WR CLAST ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE 0.0 a COS a COS	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION high mod slight from high mod slight fr	
1/2 AR PHOTONO.	0 Typical Minymax V 1364 c) Typical Minymax V 1364 c) SECTION HT, PHT PTTH m cm 1904 1 2101479165	TION: INDICATE ORIENTATION AND SCALE)		) SLOPE CONFIG. (ACROSS SLOPE) CONCAVE CONFIG. (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONFIG. (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONTRACT (ACROSS SLOPE) CONCAVE CONCAVE CONVEX (ACROSS SLOPE) CONCAVE CONCAVE CONVEX (ACROSS SLOPE) CONCAVE CONCAVE CONVEX (ACROSS SLOPE) CONCAVE CONCAVE (ACROSS SLOPE) CONCAVE CONCAVE (ACROSS SLOPE) CONCAVE CONCAVE CONVEX (ACROSS SLOPE) CONCAVE CONCAVE (ACROSS SLOPE) CONCAVE (AC	<ul> <li>BEDROCK OUTGROP . HYDRO CHAR.</li> <li>budgroeund terreun</li> </ul>	
PROJECT NO. (+area) DATE 1200/63.096 4 July SITTE	SITE DESCRIPTION(solidity) road out, at	skerch (x-sec. TO SHOW SITE POSIT madium brown son Bruno so I Un frozen		SILOPE CONFIG. (DOWN SLOPE) concave convex (straight) HILLUELOPE CONFIG. Uni) irr hum ben ter rid gul so	BOULDERS BLOCKS a(G)3 o a C PHOTOS roll mo. description []    (1 5 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	•

	()					<b>X</b> (.)
MATERVAL DESCRIPTION STICS ss. 10_cm absent BHORIZON: Interness 210_cm	absent Bc Bf Bh Bjh Bg Bgj (Bm) ss below depth ofcm B and/or C pedogenic concentration: top atcm top atcm	mipv ALS THICKNESS (m) OVERALL TEXTURE OPIGIN Bus gravel and M	gradational: horizontal or wavy bns gradational: horizontal or wavy	bris and the surface material if possible, otherwise use B horizon (weathered) anti-ICATION Anti-ICATION MATRIX TEXTURE od. weak (massive) Savd, flate Sift CLAST ROUNDNESS: A G (SR) R WR	PEBLES     COBBLES     BOULDERS       (a) c s o     (a) c s o     (a) c s o       (b) c block     (a) c s o     (a) c s o       (c) HESION     INDURATION     OXIDATION       high mod slight (non)     high mod slight (non)	REFAGMENTS WEATHERING OF CLASTS/BEDROCK WI Corb by blue Lor vicinity of site REPRESENTS POLYGONI (ES) NO ADD. NOTES IN FIELD BOOKI (ES) NO LG CC CTTT (ES) NO LG CC CTTT (ES) NO
SOIL CHARACTER LFH HORIZON: Thickn	B and/or C horizon motil	SOIL DRAINAGE: r (% SURFICIAL MATER STRATIG. UNIT	CONTACT: sharp or CONTACT: sharp or	pomplete the following for BEDDING/ST well mod. well m	SLAST. ABUNDANCE	THOLOGY OF COARS
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AR PHOTO NO.	SLOPE " % ELEVATION (m) ft. Typean Milvimax 1364 SECTION HT/PITDEPTH (m) am 3,0 E: 4449150 E: 4449150	ICATE ORIENTATION AND SCALE)		SLOPE CONFIG. (ACHOSS SLOPE) concave convex straight	DOM VEG. & MOISTURE INDICATOR PLANTS dwart blvd, gwallel mol BEDROCK OUTCROP HYDRO, CHAR a Doro UNA Chromen fland	
ECT NO (HARMA) DATE 10163.006 4 July 06 "SITTE DES	NO. ASPECT . D-12 FLAT DESCRIPTION (soli pit, road out, etc.) Nolod Stream bonk	CH (K-SEC. TO SHOW SITE POSITION: IND medium brown Sind Um frozen Brunosol		SLOPE CONFIG. (DOWN SLOPE) conceve convex straight	HILLSLOPE CONFIG. In hum ben ter rid gul sca NUMA, INVES. BOULDERS I BLOCKS a Cas a cas	TOS roll no. description 11:47 Afraguer Vink PLES

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high mod slight non A)SA SR R WR absent Bc Bi Bh Bih Bg Bg Bm complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) ૾ૢૢૺૺ ŝ ទ BOULDERS OXIDATION WEATHERING OF CLASTS/BEDROCK ADD. NOTES IN FIELD BOOK? YES NO B and/or C pedogenic concentration: top at un high REPRESENTS POLYGON YES NO Ć Z ORIGIN B HORIZON: thickness high mod slight hon Ourse Prese Amel & Said CLAST. ROUNDNESS:/ OVERALL TEXTURE MATTERNALDESCRIPTION INDURATION MATRIX TEXTURE Bo s o Sarid Shull COBBLES wavy wavy 5 CONTACT: sharp or gradational; horizontal or high mod slight fon high mod slight fon tem thick as by below I LFH HORIZON: thickness 7 cm absent gradational; horizontal BEDDING/STRATIFICATION PEBBLES THICKNESS (m) tons Vort. COHESION B and/or C horizon mottles: betok depth of about some abundant TERRAIN UNIT SYMBOL for vicinity of site ITHOLOGY OF COARSE FRAGMENTS SOIL DRAINAGE: r(w) m i p v ARV-SOIL CHARACTERISTICS (Single Contraction of the second sec S 1 vdm.sp CONTACT: sharp or CLAST, ABUNDANCE BY SIZE CONSOLIDATION Shulle JRFICIAL W STRATIG. UNIT J % CLASTS: DOM, VEG. & MOISTURE INDICATOR PLANTS ELEVATION (m.) 11. durant willing cataban lider - cut type is naily black shale with Mbachar HYDRO, CHAR. spored within fill SLOPE CONFIG. (ACROSS SLOPE) 20-13 3 33 13 4 presting SECTION HT OF DEPTH M CM 22 1402 concave convex (straight dru SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) 5 100 0 SLOPE % N: 70(4 619 BEDROCK OUTCROP AIR PHOTO NO. SITTE DESCRIPTION la C @ 3 and deal Sinn " wardow of shele P . in borrow pit by road LOCATION! Lt July 06 12:23 : View both of Hiller ul BLOCKS und )IIT hum ben ter rid gui sca SITE DESCRIPTION (soil pi) (oad cu) etc.) Indian boursel SLOPE CONFIG. (DOWN SLOPE) concave convex straight ASPECT \* HILLSLOPE CONFIG. rood and = 2.0 w 5 collies untroses 200 63,006 Aure, and PROJECT NO. (+area) -Reposed BOULDERS ٩ 6-07 Small SAMPLES SITE NO. ł.

MATERIAL DESCRIPTION A Solt CHARACTERISTICS LFH HORIZON: thickness Z cm absent BHORIZON: thickness cm	Band/or Chorizon motiles: below depth of cm Band/or C pedogenic concentration: (absent some abundant top at cm none abundant concentration:	SOLDERINGES. TO IT - P V SURFIC AL MATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	CONTACT: sharp or gradational; horizontal or wavy	bns CONTACT: sharp or gradational; hortzontal or wavy	black	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) BEDDING/STRATIFICATION well mod. weak massive % CLASTS: / i	CLAST. ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE CONFONIDATION CONFORMANCE & COBBLES BOULDERS	High mod slight from high mod slight from high mod slight from high mod slight from high mod slight non the mod slight from high mod slight non the mod slight from high mod slight non the mod slight for high mod slight non the mod slight non the mod slight for mod slight for high mod slight non the mod slight non the mod slight for high mod slight non the mod slight for high mod slight non the mod slight non the mod slight for high mod slight non the mod slight non the mod slight non the mod slight for high mod slight non the mod slight non the mod slight non the mod slight for high mod slight non the	TERRAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGONY (FES) NO GS Mp - V ADD. NOTES IN FIELD BOOKT (FES) NO V OR OF AT IN GAP	
								  :		
AR PHOTONO. GRIPTION	SECTION HT. PERSON (M) R. Typical Minnax, 1388 E: 4498592 M (m) 33 M <sup>67</sup> 70(5091	CATE OPIENTATION AND SCALE) - blown stril colore				SLOPE CONFIG. (ACROSS SLOPE) concave convex straight	DOM, VEG. & MOISTURE INDICATOR PLANTS during bydy Cearthur LTULan	BEDROGKOUTGROP HYDRO. CHAR.		
РАСИЕСТИО. (+2006) DATE 1300163.006 4 Undy 06 SITE DES	SITE DESCRIPTION (SOLIDIAL FLAT SITE DESCRIPTION (SOLIDIAL OCATION)	SKETCH (X-SEC TO SHOW SITE POSITION, IND - OVD-92 - 607000 - 10 med 144	- Regosol	· · · · · · · · · · · · · · · · · · ·		SLOPE CONFIG. (DOWN SLOPE) concave convertight	HILLSLOPE CONFIG.	BOULDERS BLOCKS a 0 s o arcs o PHOTOS roll no. description	SAMPLES	

high mod slight non I Nage Ladin - : GR CLAST. ROUNDNESS: A SA SA R WR BHORIZON: thickness cm absent Bc Br Bh Bfh Bg Bgi Bm complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) ξ a ہ© OXIDATION BOULDERS B and/or C pedogenic concentration: WEATHERING OF CLASTS/BEDROCK  $\searrow$ REPRESENTS POLYGON? VES NO top at \_\_\_\_\_cm; base at \_\_\_\_\_ none moderate high ORIGIN Sady tru still ADD. NOTES IN FIELD BOOK? high mod slight for gravely sorial OVERALL TEXTURE ATTERNAL DESCRIPTION MATRIX TEXTURE INDURATION (B) C S O COBBLES Å CONTACT: sharp or Gradational horizontal or wavy CONTACT: sharp or gradational; horizontal or wavy Observed on one ) void cast B and/or C horizon mottles: below depth of \_\_\_\_\_cm high mod slight for high mod slight for Com absent THICKNESS (m) (B) င န ဝ BEDDING/STRATIFICATION COHESION PEBBLES ERRAIN UNIT SYMBOL for vicinity of site ITHOLOGY OF COARSE FRAGMENTS some abundant SOIL DRAINAGE: r w m i p v SOIL CHARACTERISTICS (Se LFH HORIZON: thickness ŝĜ N. N Alter 20 CLAST. ABUNDANCE BY SIZE CONSOLIDATION sent/ as Cu 1 SURFICIALIN STRATIG. UNIT C % CLASTS: P DOM, VEG. & MOISTURE INDICATOR PLANTS ELEVATION (m) 1 ESTION HIPPITPEPTH m Cm 35 HYDRO, CHAR. SLOPE CONFIG. (ACROSS SLOPE) down birdy compour litch on dvy concave convex straigh SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) BEDROCK OUTGROP N ~ 70/55/L Š AIR PHOTO NO. SITE DESCRIPTION with w callerine & pedend (M× DATE UNLY 2026 LOCATION! - Some M boulder S BLOCKS ounde beautie son SITE DESCRIPTION (soil pit, mad cut, etc.) unifitr hum ben ter rid gut sca SLOPE CONFIG. (DOWN SLOPE) ASPECT ° concave forvex) straight 20 HILLSLOPE CONFIG. no. description un trozen 200163.006 Regosol PROJECT NO. (+area) BOULDERS シーロつ 13:04 PHOTOS roll SAMPLES SITE NO.

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	DESCRIPTION	B.HORIZON: thickness cm absent Bc Bf Bh Bfh Bg Bgj Bm	B and/or C pedogenic concentration: top atcm; base atcm moderate high		gravely sandy M		wavy i fi possible, otherwise use B thorizon (weathered)	MATRIX TEXTURE + Sandy sit + CLAST. ROUNDNESS: A (SA) SR R WR	COBBLES     BOULDERS       (a) 0 \$ 0     a 0 \$ 0	INDURATION OXIDATION high mod slight from WEATHERING OF CLASTS/BEDROCK	REPRESENTS POLYGON? VES NO ADD. NOTES IN FIELD BOOK? VES NO	
	MATERIAL C	LFH HORIZON: thickness 🖉 cm absent	B and/or C horizon mottles: below depth ofcm (absen) some abundant	SOLL DRAINAGE: r w m i p v SURFICIAL (NATERIALS STRATIG. UNIT THICKNESS (m)	CONTACT: sharp or gradational; horizontal or	Pus	CONTACT: Sharp or gradational; nonzontal or bins Complete the following for universitience materia	Well mod. well mod. weak massive well mod. weak massive well mod. weak massive well mod. Weak massive well mode well well well well well well well we	CLAST. ABUNDANCE PEBBLES BY SIZE	CONSOLIDATION COHESION high mod (sight) non high mod (sight) non LITHOLOGY OF COARSE FRAGMENTS	TERRAIN UNIT, SYMBOL for vicinity of site 052 MD - PIF	
	-	-			· · ·				•			
	AIR PHOTO NO.	SCRIPTION ELEVATION (C) 1.	Typical Miximax 1471 section HT, PIT DEPTH m (m) 45	IN: 701 J.J.O INDICATE ORIENTATION AND SCALE)	0.45 m may be myset / wed- inducated best	other if pit the	traction to power that so	SLOPE CONFIG. (ACROSS SLOPE) concave convex straight	DOM. VEG. & MOISTURE INDICATOR PLANTS	BEDHOCK OUTCROP HYDRO. CHAR.		
	PROJECT NO (+4243) DATE	SITEID:	SITE DESCRIPTION (SUL) DIFFERENCE OF A CONTENT	SKETCH (X-SEC. TO SHOW SITE POSITION: )	untrosen, hit holaw	no visibre lie. Regosol	1.5 m rood cut: HII bouthy and slonghing, shake vid	SLOPE CONFIG. (DOWN SLOPE) concave convex (straight	HILLSLOPE CONFIG.	BOULDERS BLOCKS a c s 0 PHOTOS rol no. description	SAMPLES	

WATERIAL DESCRIPTION         WATERIAL DESCRIPTION         SOIL CHARACTERISTICS         SOIL CHARACTERISTICS         LFH HORIZON: thickness         Chrue         Durve       col	STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN CONTACT: sharp or gradational; horizontal or wavy CONTACT: sharp or gradational; horizontal or wavy CONTACT: sharp or gradational; horizontal or wavy	Complete the following for unweathered surface material if possible, otherwise use B hortzon (weathered)       BEDDING/STRATIFICATION       well mod. well mod. weak fassive     MATRIX TEXTURE       % CLASTS:     50-44       % CLASTS:     50-44       % CLASTS:     50-44       % CLASTS:     50       % CLASTS:     50-44       % CLASTS:     50-44       % CLASTS:     50-44       % CLAST     50-44       % CLAST     50-45       % CLAST     50-44       % CLAST     50-45       % CLASTS:     50       % CLASTS:     50       % CLAST     50-45       % SIZE     50       % SIZE     50       % SIZE     50       % SIZE     50       % SIZE     50 <th>LITHOLOGY OF COARSE FIRAGMENTS WEATHERING OF CLASTS/BEDROCK EVEX CONSTRUCTION OF SUCCESSION (F) 2 3 D WILD'N' CAN SUCCESSION (F) 2 3 D TERRAIN UNIT SYMBOL for vicinity of site DST/ND ADD. NOTES IN FIELD BOOK? (FS) NO VOL 12 YI S. (FS) NO VOL 12 YI S. (FS) NO</th> <th></th>	LITHOLOGY OF COARSE FIRAGMENTS WEATHERING OF CLASTS/BEDROCK EVEX CONSTRUCTION OF SUCCESSION (F) 2 3 D WILD'N' CAN SUCCESSION (F) 2 3 D TERRAIN UNIT SYMBOL for vicinity of site DST/ND ADD. NOTES IN FIELD BOOK? (FS) NO VOL 12 YI S. (FS) NO VOL 12 YI S. (FS) NO	
PROJECT NO. (44164) DATE 12.00/63,006 44 July 2000 SINE DESCRIPTION SINE DESCRIPTION (2010 PARA) SINE PARA) SINE DESCRIPTION (2010 PARA) SINE PARA) S	red.gry sol Reposed - thick till here , Sui deep is gully lae	SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) concave convex etraight concave convex etraight HILLSLOPE CONFIG. MUJerd Med. Will M. BOULDERS BEDROCK OUTGROP HYDRO. CHAR.	PHOTOS roll no. description O 14:45 - 5 light at site, tent and GR. On depring SAMPLES	

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DESCRIPTION	BHORIZON: thickness cm absent Bc Bf Bh Bfh Bg Bgj Bm	B and/or C pedogenic concentration: top atom; base atcm omp moderate high	OVERALL TEXTURE   OFIGIN	guard C	wavy	wavy		li if possible, otherwise use B horizon (weathered)	MATHIX TEXTURE COUPUL/ BAUGU Fally	CLAST. ROUNDNESS: A SA SA R WR	COBBLES BOULDERS (a) c s o (a) c s o	INDURATION OXIDATION High mod slight from	WEATHEBING OF CLASTS/BEDROCK	TEPRESENTS POLYGON? (YES) NO
MATERIAL	OIL CHARACTERISTICS	and/of C hontzon mottles: below depth ofcm 	DIL DRAINAGE: (Du m i p v JREGCIAE,MATERIALS RATIG. UNIT THICKNESS (m)	(Pros)	NITACT: sharp or gradational; horizonial or bhis	NTACT: sharp or gradational; horizontai or	sug	splete the following for unweathered surface materia	* well mod. well mod. weak reastive	clasts: (o()	AST. ABUNDANCE PEBBLES SIZE	h mod slight from high mod slight from	HOLOGY OF COARSE FRAGMENTS	RPAIN UNIT SYMBOL for vicinity of site
	0 5	no l	X <b>X</b> 5	· · ·	8	8	· · · ·	S		%	글쭏	이 이번	<u> </u>	Щ. Н
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	ATION (m) th	р Б	(1		· .	-			SS SLOPE)	traight	CATOR PLANTS	YDRO. CHAR.		

		elevation (1) h. 1474	H H		SCALE)	•			- - -		ACDOSS SLODED		IE INDICATOR PLANTS	. нурао. сная.			
AIR PHOTO NO.	CERPTION	SLOPE %	SECTION HT/PIT DEPT	N: 7015352	CATE ORIENTATION AND			-		•		CONCERVE CON	DOM, VEG. & MOISTUF				
Huly 2006	Sineloes	Aspect •	at pit, 684 cut etc.)	LOCATION	IOW SITE POSITION; INDI					ν.		Nex straight	E CONFIG. t fer rid gul sca	BLOCKS	description		
PROJECT NO. (+area)		site No. JD-(B	SITE DESCRIPTION (30		SKETCH (X-SEC. TO SH							CONCAVO CO	HILLSLOP	BOULDERS	PHOTOS rell rio.	SAMPLES	
		•					7				 7	· · ·	.7		$\bigcap$		

		)	<u> </u>		<u>.</u>	<u>)</u> 	T	<u></u>	- <u>-</u>	· · ·	<del></del>	<u></u>	<u>,</u>	,	<u> </u>		<u>)</u>	<b>-</b> ]	·
	ckness cm	enic concentration: base atcm	derate high		ORIGIN	0				- -	B horizon (weathered)		SA SR R WR	BOULDERS a c s o	OXIDATION high mod slight no	DLASTS/BEDROCK	17 YES NO		
ES@RIPTI(@N)	B HORIZON: 41	B and/or C pedog top atcm;	none mo		OVERALL TEXTURE	rwbble	wavy		мауу		if possible, otherwise use I	AATRIX TEXTURE	CLAST. ROUNDNESS:	COBLES	INDURATION high mod slight non	WEATHERING OF O	EPRESENTS POLYGON DD. NOTES IN FIELD BC		
MATTERIAL D	TICS scm_absent	below depth of			THICKNESS (m)	suq	adational; horizontal or	sug	adational; horizontal or	suq	weathered surface material	weak massive	0	PEBBLES a c s o	COHESION high mod silght non	FRAGMENTS	or vicinity of slie		
	SOIL CHARACTERIS LFH HORIZON: Ihicknes	B and/or C horizon mottles.	ausent some SOIL DRAINAGE: r.w.	SURFICIAL MATERIA	STRATIG. UNIT		CONTACT: sharp or gr		CONTACT: sharp or gr		complete the following for un	BEDDING/STR/ well mod.well mod	% CLASTS: \0	CLAST. ABUNDANCE 3Y SIZE	CONSOLIDATION high mod slight non	THOLOGY OF COARSE	ERRAIN UNIT SYMBOL A aCK5 - Z		
······	• •• • • • •		• • • •		<b>L</b>		• <u>••</u> ••	<u></u>	<u> </u>	····			<u></u>	<u> </u>					
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	· .	√						÷ 4											
PROJECT NO. (+area) DATE	ROOI65,066 TY VILLY 2000 BOO	SITE NO. ASPECT SLOPE TO LEVATION OF THE AMOUNT AND	LOCATION E: 445840	SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE)	-HUMMOCEY EURIS REVAILS THE OF PREF MURGERS	SUBSIZENCE, POSSIBLE MERTING OF ICH LENGES.			· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	SLOPE CONFIG. (DOWN, SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave convex etraight concave convex atraight	HILLSLOPE GONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS uni irr hum ben fer hid gul sca	BOULDERS BLOCKS BEDROCK OUTCHOP HYDRO. CHAR.	PHOTOS roll no description 11(:3) (A) obviolin - page of variating E to W from JD-19	SAMPLES		

		TERHAIN UNIT SYMBOL for visionity of site REPRES $NNJ_{0}/5/NR$ ADD. NO	5 holds & goot to window we are proposed	LITHOLOGY OF COARSE FRAGMENTS WEATH	CONSOLIDATION COMESION (NDUR high mod slight non high mod slight non high mod s	biolde a c s o a c s	CLAST ABUNDANCE PEBBLES COBBLE	% CLASTS: DELASTS:	Well mod. weak massive MATRIX TEXTURE	Complete the following for unweathered surface material if possible, otherwise	pus	CONTACT: sharp or gradational; horizontal or wavy	L (Das)	CONTACT: sharp or gradational; horizontai or wavy		SUMPLUATION IEMIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTUR	soil drainage: r 🔗 m i p v	B and/or C horizon mottles: below depth ofcm B and/or C top attop a	LFH HORIZON: thicknass - Cm absent B HORIZO absent B defended	MATERIAL DESCRIPTIO	
DATE     ARPHOTONO.       H J UL, 2006     SITERESCRIPTION       SSTERESCRIPTION     MAPPENT       SSTERESCRIPTION     READING       AFECT     LOPE       AFEC		@ Mu of VALLEY FROM JJ-20	2 PAN OF THIS STRE FROM ACRES UPILLEY		BLOCKS BEDROCK OUTCROP HYDRO, CHAR.	tar rid gul sca	E CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS	vex (straight	(DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)				-		ide start dipping North; more quorene?) [ bedding not clear] on	flows down fault: shall on	LOCATED N: TOI 5458 OW SITE POSITION: INDICATE ORIENTATION AND SCALE)	phi road out, etc.) SECTION HT/PIT DEPTH (m) on 2,0	ASPECT . SLOPE . " ELEVATION I ASPECT . (C) Man daul I alope . " I 50/ III	4 d uly 2006 AIR PHOTO NO.	

		LFH HORIZON: thickness // cm absent BHORIZON: thickness cm absent Bc Bf Bh Bfh Bg Bgj Bm	B and/or C holizon-mottles: below depth ofcm B and/or C pedogenic concentration: absent some abundant top atcm base atcm	SOIL DRAINAGE: r 🕲 m i p v	SURFIC AL MATERIALS STRATIG, UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	1 may gravel e sort C	CONTACT: sharp or gradational; horizontal or wavy	brs	CONTACT: sharp or gradational; horizontal or wavy	pus	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATIFICATION well mod. weak massive	CLASTS: 60 CLAST. ROUNDNESS. (A) SA SA R WR	CLAST ABUNDANCE     PEBBLES     COBBLES     BOULDERS       BY SIZE     (a) c s o     (a) c s o     (a) (b) s o	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION Ingh mod slight for high mod slight for high mod slight for	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK Aroly avgyllite	TEARAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? (YES) NO	Shiph seguration GR
•								•						•				
		ESCRIPTION (CON) SLOPE * (S) ELEVATION (CO) 4.	P-10-76 Typical Mintmax 1522 SECTION HT/PIT DEPTH m cm	NO: 701 0 TO AND SCALE)	< RO WUDED 709	NUDBES IN- In dute conte		r freehad					SLUFE CUNING (ACHUSS SLUFE) concave convex) straight	DOM. VEO. & MOISTURE INDICATOR PLANTS	BEDROCK OUTCROP HYDRO. CHAR. a c(5) o	humber of And Led hite bla	( ) - ( and ( w) / man	
	200163,006 5 July 2006	T SITE DE	Vブース / 1(ひ ビ SITE DESCRIPTION (soil pi) road cut, etc.)	SKETCH (X-SEC. TO SHOW SITE POSITION; IN	- Locator on Hummod	- FROT BOILT = 8000 nuted = permotro	- Reassel	- pernadropt with inter					SLUPE CUMPIG, (UOWN SLUPE) concave (convex) straight	HILLSLOPE CONFIG. Uni irr hum ben ter rid gut sca	BOULDERS BLOCKS a grafo a 6)e o	PHOTOS roll no. description	SAMPLES	₹.

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WATERIAL DESCRIPTION: SOIL CHARACTERISTICS LFH HORIZON: thicknesscm absent B HORIZON: thicknessm LFH HORIZON: thicknessm absent being absent B and/or C pedogenic concentration: top alm; base atm	SOIL PRAINAGE: r (w) m i p v SUPECALINIVIERIA: STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN OVERALL TEXTURE ORIGIN Bins OVERALL TEXTURE ORIGIN Pins Sorre 5717 CONTACT: sharp or gradational; horizontal or wavy CONTACT: sharp or gradational; horizontal or wavy	Discription     Discription       Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)       BEDDING(STRATIFICATION)       well     mod, weak       Mark TEXTURE       well     mod, weak       Mod (well     mod, weak       % CLASTS:     D D       % CLASTS:     D SD SD       % CLASTS:     SD SD SD       % CLAST     SUNDANCE       PEBBLES     CABBLES       % CLAST     SOULDERS       % SOULDERS     SOULDERS	
PROJECT NO (48164) DATE 1200 (63.066 5 July SITIE DESCRIPTION SITE NO. SITIE DESCRIPTION (501 pr), DATE SITIE DESCRIPTION (501 pr), DATE SITIE DESCRIPTION (501 pr), DATE SITE DESCRIPTION (501 pr), DATE 04, 40.) SITE 04, 40.) SITE DESCRIPTION (501 pr), DATE 04, 40.) SITE 04, 40.	SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) - Range of the Continued	SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (DOWN SLOPE) concave convex (straight concave convex (s	

	aicknass cm 3h Bfh Bg Bgj Bm	genic concentration: n; base at cm oderate high		ORIGIN	×		e B hortzon (weathered)	A SA SH R WR BOULDERS a c s o	OXIDATION high mod slight non	F CLASTS/BEDROCK 2 3 D	DN7 (YES) NO BOOK7 YES (NO
DESCRIPTION	B HORIZON: 11 absent Bc Bf B	B and/or C pedo top at cn		OVERALL TEXTURE	¢ wavy	r wavy	rial if possible, otherwise us MATRIX TEXTURE	CLAST. ROUNDNËSS: COBBLES a c s o	INDURATION high mod slight nor	WEATHERINGO	REPRESENTS POLYG ADD. NOTES IN FIELD
MATERIAL I	sscm_absent	s: balow depth ofcm e abundant	m i p v Z	THICKNESS (m)	gradational horizontal o	gradational; horizontal o	unweathered surface mate RATIFICATION	PEBBLES: PEBBLES:	COHESION high mod sight non	SE FRAGMENTS	L for vicinity of site
SOIL CHARACTERIS	LFH HORIZON: thickne	B and/or C horizon mottle.	SULTERAINAGE	STRATIG. UNIT	CONTACT: sharp or (	CONTACT: sharp or g	Complete the following for the BEDDING/STT	% CLASTS: CCSST ABUNDANCE BY SIZE	CONSOLIDATION	LITHOLOGY OF COARS	

DOM, VEG. & MOISTURE INDICATOR PLANTS 11:34 - VION VENUS CERT TOUD23 from UD22 ELEVATION m. ft. HYDRO, CHAR. SLOPE CONFIG. (ACROSS SLOPE) R-controlled. This site, belieck the concave convex straight der SECTION HT/PIT DEPTH m cm SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) hummades of white the care MM BEDROCK OUTCROP Typical Min/max e e e AIR PHOTO NO. % adots SMEDESCRIPTION on side-slope PROJECT NO. (+21703) DATE 200 (63.006 5-July 2006 View three Jo-22 BLOCKS SITE DESCRIPTION (soil pit, road cut, etc.) HILLSLOPE CONFIG. unt irr (hum) ben ter rid gut sca SLOPE CONFIG. (DOWN SLOPE) 200concave convex straight ASPECT . exposed SITE NO. BOULDERS SAMPLES

	LFH HORIZON: thickness & cm absent B HORIZON: thickness cm (absent Bo Bf Bh Bfh Bg Bgj Bm	B and/or C horizon motiles: below depth ofcm B and/or C pedogenic concentration: top atcm top atcm highcm	SOIL DRAINAGE: 70 m i p v SUBEICIAL MATERIALS	STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	Party three sitt C	CONTACT: sharp or gradational; horizontal or wavy	pus	CONTACT: sharp or gradational; horizontai or wavy	sug	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATIFICATION MATRIX TEXTURE well mod. weal massive	CLASTS: CLAST. ROUNDNESS: A SA R WR	CLAST. ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE (2) 0 5 0 (2) 0 5 0 2 0 5 0	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION Ingh mod slight for high mod sli	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK	TERRAIN UNIT, SYMBOL for vicinity of site REPRESENTS POLYGON? (ES) NO CD/Rh VV/V/AATON1 (ES) NO		· ·	
			· · · · · · · · · · · · · · · · · · ·		. –	:							· · · · · · · · · · · · · · · · · · ·				• .		
PROJECT NO. (+area) DATE AIR PHOTO NO.	TENO. ASPECT & SLOPE ** ELEVATION & ft.	SITE DESCRIPTION (soil ph, road out, etc.) SECTION HIVMARY 1590 STE DESCRIPTION (soil ph, road out, etc.) SECTION HIZPIT DEPTH m om	SKETCH (X-SEC. TO SHOW SITE POSITION: INDICATE ORIENTATION AND SCALE)	-AT 5025 OF RUCK CANON	-caryon drythe a 40m					-		SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) concave convex straight concave convex straight	HILSLOPE CONFIG. DOM, VEG, & MOISTURE INDICATOR PLANTS uni irr frum ben ter rid gui sca	BOULDERS BLOCKS BEDROCK OUTCROP HYDRO. CHAR. a Co a O V S V	PHOTOS roll no. description	SAMPLES			

MATERIALE DESCRIPTION       SOL CHARACTERISTICS       LIPH HORIZON: Indeneas.       B and/or C horizon methematical indeneas.       SOL DRAINAGE: r. w(m) i p. v.       CONTACT: stamp or gradialionati. horizontal a r. way.       CONTACT: stamp or graditionati. horizontal a r. way.<		<u> </u>	) 	، 				 <del></del> .		, 	<u></u> .	)		J.		
SOL CHARACTERISTICS       SOL CHARACTERISTICS       LFH HORIZON: thickness     Can absent     B. H.D.B.ZON: thickness       LFH HORIZON: thickness     Can absent     B. Andor C peddoge       B andor C horizon protiles: below depth of	C C C	Bfh Bg Bg Bm	ric concentration: ase atcm rate_high		ORIGIN	M (Q				horizon (weathered)	5 11	SA SR R WR	BOULDERS a c (s) o	OXIDATION high mod slight r	LASTS/BEDROCK	Y YES NO OK? YES NO
MATERIANCE         SOIL CHARACTERISTICS         LIFH HORIZON: thicknass       Cm absent         Bandior C horizon motiles: below depth ofm         Bandior C horizon motiles: below depth ofm         SOIL DRAINAGE: r w(m) i p v         SOIL DRAINAGE: r w(m) i p v         SURFIC/ALMITERIALS         SUL DRAINAGE: r w(m) i p v         SOIL DRAINAGE: r w(m) i p v         SOIL DRAINAGE: r w(m) i p v         SOIL DRAINAGE: r w(m) i p v         SCONTACT: sharp or gradational: horizonial or         Complete the following for unweathered surface materiation in the solution of the mod. weak massive         % CLAST:         % CLASTS:         Consolubation       high mod slight non high nod slight non high nod slight non high mod slight non high mod s	ESCRIPTION BHOBIZON: mick	absent Bc Bf Bh	B and/or C pedoger top atcm; b; mode		OVERALL TEXTURE	Spar elly.	wavy	wavy	-	al if possible, otherwise use B	MATRIX TEXTURE Sandy DON-0	CLAST. ROUNDNESS:	COBBLES (a) o s o	INDURATION high mod slight non	WEATHERING OF CI	REPRESENTS POLYGON ADD. NOTES IN FIELD BO
SOIL CHARACTERIS SOIL CHARACTERIS SOIL CHARACTERIS B and/or C horizon motiles SOIL DRAINAGE: r w SOIL DRAINAGE CONTACT: Sharp or g CONTACT: SHARP o	NNATERIAN STICS so 6 cm absent		s: below depth ofcm e abundant	(m)і р v	ALS THICKNESS (m)	suo	pradational: horizontal or	iradational; horizonital or	suq	inweathered surface materi	ATIFICATION		PEBBLES a) c s o	COHESION high mod slight non	E FRAGMENTS redtherets	for vicinity of site
	SOIL CHARACTERIS		B and/or C horizon mottles	SOIL DRAINAGE: r w	SURFICIAL MATERI STRATIG. UNIT		CONTACT: sharp or g	CONTACT: sharp or g		Complete the following for u	BEDDING/STF well mod. well mo	% CLASTS:	CLAST. ABUNDANCE BY SIZE	CONSOLIDATION high mod slight non	LITHOLOGY OF COARS	TERRAIN UNIT SYMBOL

PROJECT NO. (Harma)     DATE     AAR PHOTO NO.       12400163.0316     544472436     AARPECT     Name       SITIE DESCRIPTION (solid) polad out, etc.)     ASPECT     Name     SLOPE     Name       SITE NO.     ASPECT     ASPECT     SLOPE     Name       SITE NO.     ASPECT     SLOPE     Name       STE NO.     ASPECT     SLOPE     Name       STE NO.     LONATION NAND     E: 44403443       SKETCH (X-SEC. TO SHOW SITE*POSITION; INDICATE ORIENTATION AND     E: 44403443       PLOPA CONFIG. (DOWN SLOPE)     LONATION AND     E: 44403443       PLOPA CONFIG. (DOWN SLOPE)     N: 7015944     Concase concase       PLOPA CONFIG. (DOWN SLOPE)     N: 7015945     Concase concase       PLOPA CONFIG. (DOWN SLOPE)     SLOPE CONFIG.     Concase concase       MILLSLOPE CONFIG. (DOWN SLOPE)     DOM, VEG. ANOISTUR     Concase concase       MILL     Mill run ben ter rid gut sca     BOULDERS     BOULDERS       PHOTOS rol no.     description     SLOPE     ASMPLES		ELEVATION (m) 11.		SCALE)		(ACROSS SLOPE) Nex (straigh)	RE INDICATOR PLANTS	НҮРРО. СНАЯ.		
PROJECT NO. (+area) DATE 12-00163,036 554472016 SITE NO. SITE NO. SITE DESCRIPTION (soli pi) road out, euc) LDUATION SKETCH (X-SEC. TO SHOW SITE POSITION; IND SKETCH (X-SEC. TO SHOW SITE POSITION; IND COMM SITE DESCRIPTION (soli pi) road out, euc) PLOUREN CONFIG. (DOWN SLOPE) CONTROL (POWN SLOPE) SLOPE CONFIG. (DOWN SLOPE) CONTROL (POWN SLOPE) CONTROL (POWN SLOPE) SLOPE CONFIG. (DOWN SLOPE) CONTROL (POWN SLOPE) SLOPE CONFIG. (DOWN	AIR PHOTO NO.	CRIPITION SLOPE * %	E: 440743	ICATE ORIENTATION AND		SLOPE CONFIG.	DOM, VEG. & MOISTUF	BEDROCK OUTCROP		
PROJECT NO. (+41064) 12-05/63, 03/5 SITE DESCRIPTION (60 SITE D	DATE DATE 5 July 2016	SITE DES Aspect •	II ply road cut, etc.)	IOW SITE POSITION, IND		(DOWN SLOPE)	E CONFIG. • ter rid gui sca	BLOCKS	description	
	PROJECT NO. (+area)	SITE NO.	SITE DESCRIPTION (160	SKETCH (K-SEC. TO SH		SLOPE CONFIG	HILSLOP	BOULDERS	PHOTOS roll no. 0	SAMPLES

					<u></u>		<u>)</u> .	
	vicknesscm vicknesscm sh Bth Bg Bgj Bm genic concentration: r; base atcm oderate high		X	e B horizon (weathered)	A SA R WR BOULDERS a c Co	high mod slight from c.c.asts/seeDROCK 2 3 D	NY CESNO BOOKY (ES)NO	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	DESCRIPTION B HORIZON: 1 absent BC Bf B B and/or C pedo top at on m	OVERALL TEXTURE COOLE Georally soul	gravely stiff	MATRIX TEXTURE	50 177 5 2000 CLAST. ROUNDNESS: COBBLES B C S 0	INDURATION high mod slight non WEATHERING OF	HSKNY & YOR ALAC O REPRESENTS POLYCC ADD. NOTES IN FIELD B NYZJ CHANT	
<b>TANELTING LARGE NOTE: TANELTING LARGE TANELTING L</b>	MATERIAL ISTICS ness_9_cm_absent las: below depth oforr ome_abundant mb_v	THICKNESS (m) THICKNESS (m) ASGRAMANUC Das Das	biss	r unweathered surface mate TRATIFICATION mod. weak (massive)		high mod slight mod ster FRAGMENTS	s was any grandic of tar vicinity of site 5 M b.	
PRACET MAL MALE AND AT AND A AT HADONO A A MANDANA AND A A AND A A	SOIL CHARACTEF SOIL CHARACTEF LFH HORIZON: thick B and/or C horizon mot absent s: SOIL DRAINAGE: r	SURFICIAL WATE STRATIG. UNIT	Contact: sharp or	Complete the following fo BEDDING/S well mod.well r	% CLASTS: ~ H % CLASTS: ~ H CLAST ABUNDANCE BY SIZE	consol lbarlow high mod slight (nor LITHOLOGY OF COAF	TEARAIN UNIT SYMB CX / 29.	
PROJECT NO. (1940) DATE PROJECT NO. (1940) DA	· · · · · · · · · · · · · · · · · · ·	•						
PROJECTINO. (name)     Date     All PHOTO NO.       120163,006     5414,206     All PHOTO NO.       SETENC, (name)     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETENCH, (name)       PROPE     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETENCH, (name)       PROPE     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETENCH, (name)       PROPE     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETENCH, (name)       PROPE     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETENCH, (name)       Program     SETENCH, (name)     SETENCH, (name)       SETENCH, (name)     SETENCH, (name)     SETE				÷ .				
PRODUCT NO. (name)     DATE     JATE PROTO NO.       1200 (63,066     5 July 2006     3 July No.     2000 (53,066       STENA     APPENT     3 July No.     2000 (53,066       STENA     APPENT     3 July No.     2000 (53,066       STENA     APPENT     3 July No.     5 July Job       STENA     APPENT     3 July No.     5 July Job       STENA     SECONTION (60) (10) (10) (10) (10) (10) (10) (10) (1			:					
PROJECT NO. (4-978-81) DATE 1700 163,056 5 July 2606 SITE NO. SITE NO. SITE DESCRIPTION (Solf p) road out, ac.) SITE DESCRIPTION (Solf p) road out, ac.) SECTOR REPORTING (Solf p) road CAY 9 LOL R PROJECT NUM (S. 4) LOCATION, INDOATE ORI CAY 9 LOL R PROJECT NUM (S. 4) LOCATION, INDOATE ORI ALLIAN R PROJECT NUM (S. 4) SEDRO SLOPE CONFIG. (DOWN SLOPE) SI SLOPE SC SLOPE SI SLOPE	TONO. TONO. S. M. ELEVATION (C) 1. S. M. Minimax Minimax 1.539 1.5	caryon draining to west,			OPE CONFIG. (ACROSS SLOPE) concave convex (straight) ( W. C.	CKOUTCROP HYDRO. CHAR.		
PROJECT NO. (+area) DATE 1206163,056 5July 26 SITE NO. ASPECT * SITE NO. ASPECT * SITE DESCRIPTION (Solipi)/oad out, atc.) DOUT SKETCH (X-SEC. TO SHOW SITE POSITIO SKETCH (X-SEC. TO SHOW SITE POSITIO C.Y. 9 U.C. 7 C.Y. 9 U.C. 7 UI (f) hum ban tar rid out eca BOULDERS BOULDERS PLACE ONFIG. (DOWN SLOPE) C.Y. 9 U.C. 7 MILLSLOPE CONFIG. (DOWN SLOPE) C.Y. 9 U.C. 10 MILLSLOPE CONFIG. (DOWN SLOPE) SAMPLES SAMPLES	Ala PHC	to in to		•	DOM, V	BEDRO		
PROJECT NO. (+area) 12.06 163,056 SITE NO. SITE DESCRIPTION (S SKETCH (X-SEC. TO SI SKETCH (X-SEC. TO SI					topE)	ocks 0 • •	246	
	DATE 55 July 2606 SINFEDE ASPECT ° 340 N 340 N Ippload out, acc)	L R 2/2			L. (pown si invex straig E. CONFIG.	a Bi	Den +	

MATERIAL DESCRIPTION	ACTERISTICS : thickness 6 cm absent BHORIZON: thickness cm absent Bc Bf Bh Bfh Bg Bgj Bm	conmottles: below depth ofcm B and/or C pedogenic concentration: ant come abundant top atcm; base atcm	E: (w) m i p v Aterialis · Thickness (m)   Overall texture   Origin	bus aravelly M (C?)	pus	ITP or gradational; horizontal or wavy	wing for unweathered surface malerial if possible, otherwise use B hortzon (weathered) ING/STRATH-ICATIONCY Matrix TEXTURE mod. weak massive	CLAST ROUNDNESS: A SA SH R WR	TON COHESION INDURATION OXIDATION	M non high mod slight non high mod slight non slight no	SYMBOL for vicinity of site REPRESENTS POLYGON? VES NO NO. (C?) ADD. NOTES IN FIELD BOOK? VES NO NY 47. X 23. 47. 47. 47.	
	SOIL CHA LFH HORIZC	B and/or C ho	SOL DRAIN SUBRECA	CONTACT		CONTACT: 6	Complete the ft	% CLASTS:		high mod s	TERFAIN UNI	
PROJECT NO. (+EITE) DATE AIR PHOTO NO.		SITE DESCRIPTION (soil pit, road out, etc.) SECTION HIJPIT DEPTH m (m) 250	LOCATLY" N. 701 8456 SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) - Regarsed	- dout grey soil			SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave convex straight concave convey straight	HILLSLOPE CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS	a a boulders belooks bebrook of the HAR CHAR. a a b o a c 3 b a c 3 c d c f f f f f f f f f f f f f f f f f	(2) 14:09 SAMPLES	

		MATERIAL	DESCRIPTION	
	SOIL CHARACTERIS	TICS		
	LFH HORIZON: thicknes	s / cm absent	B HORIZON: Mich	mess (6 cm
. ·		•	nd nd ord inesola	
-	B and/or C horizon mottles:	below depth ofcm	B and/or C pedoge	nic concentration:
	absent	abundant	top at omin	ase ar
	SOIL DRAINAGE: r w	∧ d i @		· · · · · · · · · · · · · · · · · · ·
	SURFICIAL MATERIA	ST ST		
	STRATIG. UNIT	THICKNESS (m)	OVERALL TEXTURE	ORIGIN
		Sug	silly soud	W
	CONTACT: sharp or gr	adational; horizontal or	wavy	
		suq		
	CONTACT: sharp or gr	adational; horizontal or	wavy	
		bns		
	Complete the following for ur	weathered surface materi	ial if possible, otherwise use B	horizon (weathered)
	BEDDING/Support	ATIFICATION	MATRIX TEXTURE	Y
	% CLASTS:		CLAST. ROUNDNESS: A	SA SR R WR
	CLAST. ABUNDANCE BY SIZE	PEBBLES	cobbles a Ø s o	BOULDERS
	CONSOLIDATION	COHESION high mod slight from	INDURATION high mod slight	OXIDATION
	LITHOLOGY OF COARSE Sholy block (Su	FRAGMENTS	WEATHERING OF O	LASTS/BEDROCK 3 D
	TERRAIN UNIT SYMBOL	for vicinity of site	REPRESENTS POLYGON	TYES NO
	925 N		ADD. NOTES IN FIELD BO	OK? (ES) NO
	2			<u>1</u> 7

- | gen -35cm ELEVATION (T) 4. 1354 tall willow; sprue up to 201 DOM, VEG. & MOISTURE INDICATOR PLANTS valley slupe 25 Wet OWEV SLOPE CONFIG. (ACROSS SLOPE) concave convex straight SECTION HT/PIT DEPTH m cm SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) LTH ې هم J BEDROCK OUTCROP N: 2017.858 Typical Min/max AIR PHOTO NO. SLOPE % **SINE DESCRIPTION** bettom of pit • LOCATION PROJECT NO (+4808) DATE 1200/63,00 6 5 Jed 2006 220° SW BLOCKS uni) irr hum ben ter rid gul soa SITE DESCRIPTION (soil pit, road cut, etc.) SLOPE CONFIG. (DOWN SLOPE) ASPECT ° concave convex singly HILLSLOPE CONFIG. PHOTOS roll no. description -Brunisel SITE NO. ¢ BOULDERS SAMPLES ÷

SOIL CHARACTERIS	MATERIAL C	DESCRIPTION		
LFH HORIZON: thicknes	ss 12-cm absent	BHORIZON: Ihid absent Bc Bf Bh	rnesscm Bith Bg Bgj Bm	<u>r</u>
B and/or C horizon mottles	:: below depth ofcm eabundant	B and/or C pedoge top atmons	nic concentration: ase atcm arate high	<u> </u>
SOIL DRAINAGE: T W	∧ d()			
STRATIG. UNIT	THICKNESS (m)	OVERALL TEXTURE	ORIGIN	
	suq	STITY Sound		<u>,                                     </u>
CONTACT: sharp or g	Iradational; horizontal or	r wavy		, i
				· · · · · · · · · · · · · · · · · · ·
CONTACT: sharp or g	iradational; horizontal or	. wavy		<b></b>
	suq			
Complete the following for u	inweathered surface materi	ial if possible, otherwise use B	horizon (weathered)	r
BEDDING/STR well mod. well mo	ATIFICATION	MATRIX TEXTURE		<u>,</u>
% CLASTS:		CLAST, ROUNDNESS: A	SA R WR	; •
CLAST. ABUNDANCE BY SIZE	PEBBLES	COBBLES	BOULDERS a co	
CONSOLIDATION high mod slight non	COHESION high mod slight non	INDURATION high mod slight non	OXIDATION high mod slight non	<u></u>
LITHOLOGY OF COARS	E FRAGMENTS Fright Philit (SA		LASTS/BEDROCK 3 D	<u> </u>
TERRAIN UNIT SYMBOL	for vicinity of site	REPRESENTS POLYGON	? YES NO	/
gzs M	b or Cu/Mb?	ADD. NOTES IN FIELU BU	OK? YES NO	

DOM, VEG. & MOISTURE INDICATOR PLANTS ELEVATION (m) #. HYDRO CHAR. SLOPE CONFIG. (ACROSS SLOPE) slopes concave convex straight O 15:56 - when arms valley to site JD-27 t m SECTION HT/PIT DEPTH m cm SKETCH (X-SEC. TO SHOW SITE POSITION: INDICATE ORIENTATION AND SCALE) SLOPE % 51/251 Typical Mirvinax 6:438129 BEDROCK OUTCHOP PPTT 104 1 AIR PHOTO NO. SITEDESCRIPTION LOCATION 5 July 2016 when ASPECT . 360°N BLOCKS uni irr hum ben ter rid gul sca SITE DESCRIPTION (soil pit, road cut, etc.) SLOPE CONFIG. (DOWN SLOPE) concave convex finight HILLSLOPE CONFIG. PHOTOS roll no. description -gently slowed black still -Regosol PROJECT NO. (+area) SITE NO. JD-29 1200163,006 0 s o e BOULDERS SAMPLES

			MATERIAL	DESCRIPTION		12/12/1
		SOIL CHARACTERIS	stics			
	2	LFH HORIZON: thicknes	ss 🖉 cm absent	B HORIZON: thick	kness 7.5 cm	T
				absent Bc Bf Bh	Bth Bg Bgj Bm	
	· · ·	B and/or C hodzon motiles	e halow danih of	B and/or C pedoge	nic concentration:	
		absent som	e abundant	top atcm; b	ase atcm	
i i V	s. S			none mode	srate high	<u> </u>
÷.		SOIL DRAINAGE: r	h i p v			
	1. 1	SURFICIAL WATERI	STO STORES			
		STRATIG. UNIT	THICKNESS (m)	OVERALL TEXTURE	ORIGIN	
			bns			<u> </u>
		CONTACT: sharp or g	radational; horizorital o	r wavy		T
						Ì
			sud			
		CONTACT: sharp or g	adational; horizontal o	r wavy		ŀ
			sud			<u>,</u>
		Complete the following for u	nweathered surface mater	l it possible, otherwise use B	horizon (weathered)	· · ·
		BEDDING/STR well mod well mod	ATIFICATION	MATRIX TEXTURE		· · · · · ·
	•••••	% CLASTS:		CLAST. ROUNDNESS: A	SA) SR R WR	<u></u>
		CLAST ABUNDANCE BY SIZE	PEBBLES	COBBLES a 6 s o	BOULDERS a c (6) o	
		CONSOLIDATION high mod slight non	COHESION high mod slight non	iNDURATION high mod slight non	OXIDATION high mod slight non	<u> </u>
		LITHOLOGY OF GOARSE bldrs ove typic sediments	FRAGMENTS	WEATHERING OF CI	ASTS/BEDROCK 3 D	· · · ·
		TERRAIN UNIT SYMBOL	for vicinity of site	REPRESENTS POLYGON?	VES NO	<u>)                                    </u>
	· · · · · · · · · · · · · · · · · · ·	4W		ADD. NOTES IN FIELD BOC Vege faction:	DK? (FES NO	

ELEVATION C #. SECTION HIJPIL DEPTH ( O.40 DOM. VEG. & MOISTURE INDICATOR PLANTS HYDRO, CHAR. - LOCATED JUST DEMOSCOPE OF FLAT-TAMED SLOPE CONFIG. (ACROSS SLOPE) concave convex draight SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) SLOPE % / 36 / 307/36 / Typical Min/max BEDROCK OUTCROP LOCATION: N: 7019100 a) B AIR PHOTO NO. SINE DESCRIPTION DATE 5 July 2006 PHOTOS roll no. description D 16:19 D 54.0 PE E GR SITE DESCRIPTION (soil plt load cut, etc.) HILLSLOPE CONFIG. BLOCKS SLOPE CONFIG. (DOWN SLOPE) concave convex difaight ASPECT \* Murdige PROJECT NO. (+aras) 1200/63,506 SITE NO. BOULDERS SAMPLES

MATERAL	DESCRIPTION
SOIL CHARACTERISTICS	
LFH HORIZON: thickness 7 cm absent	B HOBIZON: Inickness cm absent Bc Bf Bh Bfh Bg Bgj Bm
B and/or C horizon motiles: below depth ofon	B and/or C pedogenic concentration: top atcm; base atcm mone_moderate high
SOIL DRAINAGE: r W m i p v	
SURFICIAL MATERIALS	OVERALL TEXTURE CRIGIN
(pus)	gravely sand M
CONTACT: sharp or gradational; horizontal	di wavy
suq	
CONTACT: sharp or gradational; horizontai	r wavy
sud	
Complete the following for unweathered surface mat	rial if possible, otherwise use B horizon (weathered)
BEDDING/STRATIFICATION well mod. weak massive	MATAIXTEXTURE Sand, trace Sift
% CLASTS: 30	CLAST. ROUNDNESS: () () SH R WR
CLAST ABUNDANCE PEBBLES BY SIZE	COBBLES BOULDERS a 0 5 0 a 0 5 0
CONSOLIDATION COHESION high mod slight non	INDURATION OXIDATION high mod slight non high mod slight non
LITHOLOGY OF COARSE FRAGMENTS vnostty skely avgillite, 5000e gyvruitie	WEATHERING OF CLASTS/BEDROCK
TERRAIN UNIT SYMBOL for vicinity of site	HEPRESENTS POLYGON? VES NO
C× 195 MD	ADD. NOTES IN FIELD BOOK? (YES) NO Vige of a tion: C.R.

DOM VEG. & MOISTURE INDICATOR PLANTS COL (BOU ITCLON, MOI), MOUTH HYDRO. CHAR. dry site HO Y <u>v</u> ELEVATION (m. 8 SLOPE CONFIG. (ACROSS SLOPE) E) de abrue; Mb/R sepred in dep stream congo 1529 concave convex (straight) J ECTION HT/PIT DEPTH m Cm) SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) - ON SWITTING I ANGULAR SHANG ( et eo 300 BEDROCK OUTCROP SLOPE % N: 7017640 le la AIR PHOTO NO. SITE DESCRIPTION collect run off from up-vidge -a [Omk(Om s)ump block - block / V. doule gray soil above stream - at en LOCATIVE 5 July 2006 uni) ir hum ben ter rid gul sca stryhtly ivreg. j. BLOCKS SITE DESCRIPTION (soil pi), road cut, etc.) SLOPE CONFIG. (DOWN SLOPE) K-LA concave convex straight ASPECT ° HILLSLOPE CONFIG. DATE -Regasor PROJECT NO. (+area) 1200163,006 JD-31 BouldERS SAMPLES SITE NO.

J high mod slight from high mod slight from CLAST, ROUNDNESS: A SA SA R WR omplete the following for unweathered surface material if possible, otherwise use B horizon (weathered) B HORIZON: thickness cm absent Bc Bf Bh Bith Bg Bgj Bm а о**0**° Ë BOULDERS OXIDATION S S S S WEATHERING OF CLASTS/BEDROCK B and/or C pedogenic concentration: g vegetation: GR none moderate high REPRESENTS POLYGON? (YES ORIGIN cm; base at F 1 2 3 D ADD. NOTES IN FIELD BOOK? gravel 51/44 5AND **RALE DESCRIPTION** OVERALL TEXTURE MATRIX TEXTURE INDURATION (a) o s o COBBLES top at SOME or wavy or gradational; horizontal or wavy Ę high mod slight non LFH HORIZON: thickness /5 cm absent CONTACT: sharp or gradational; horizonial BEDDING/STRATIFICATION mod. well mod. weak massive THICKNESS (m) وه ، د ا PEBBLES COHESION Herense Ac (Be?) B and/or C horizon mottles: below depth of TERRAIN UNIT SYMBOL for vicinity of site LITHOLOGY OF COARSE FRAGMENTS absent some abundant soil drainage: r w m0p v SOIL CHARACTERISTICS ŝ ğ bns gzs Mb high mod slight for CLAST. ABUNDANCE BY SIZE CONSOLIDATION sharp SURFICIAL MI STRATIG, UNIT VERIENS CONTACT: % CLASTS: well (feature rested on air plats). Ice-riticity has ELEVATION () ft. - LARCO BOULDING BANGO ON SURFACE (BROUGHT TO SURFACE BY CRYOTORBATION). DOM, VEG. & MOISTURE INDICATOR PLANTS HYDRO, CHAR. SECTION HT/PIT DEPTH m Cm) 6 wet site - water pooling in said pit where vegetation is literated actual slope SLOPE CONFIG. (ACROSS SLOPE) 1465 concave convex straigh SKETCH (X-SEC. TO SHOW SLIFE POSITION; INDICATE ORIENTATION AND SCALE) SLOPE . SLOPE . TAVA BEDROCK OUTCROP OCATION N: 7016991 AIR PHOTO NO. SIRE DESCRIPTION -medium group soil colour 5 July200 () (8:02 - rit, Ch, medow aspect . 3/D°SW SITE DESCRIPTION (soil plt, road cut, etc.) BLOCKS uni jir hum ben ter rid gul sca SLOPE CONFIG. (DOWN SLOPE) concave convex straight HILLSLOPE CONFIG. description PROJECT NO. (+area) - Kego 501 PHOTOS roll no. 200/63,006 JD-32 SITE NO. SAMPLES

SOIL CHARACTERISTICS	LFH HORIZON: thickness 4 cm absent B HORIZON: thickness cm Over Jours 10 besent B H Bih Bg Bgi Bm	B and/or C horizon mottles: below depth ofcm B and/or C pedogenic concentration: top atcm; base atcmcmtop atcm; pase atcm	SOIL DRAINAGE: r w 🛞 i p v SURFICIAL MATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	) disc/die blocky C	CONTACT: sharp or gradational; horizontal or (wavy)	2 (one) grovewysning M	CONTACT: sharp or gradational; horizontal or wavy	brs	Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	well mod well mod weak massive SILTY Some	CLASTS: HO	CLAST. ABUNDANCE     PEBBLES     COBBLES     BOULDERS       BY SIZE     (a) c s o     (a) c s o     (a) c s o	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION Ingh mod slight from high mod slight fr	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK	TEHRAIN UNIT, SYMBOL for vicinity of site REPRESENTS POLYGON? (VES) NO OCT / 975 M D ADD. NOTES IN FIELD BOOK? (YES) NO	
PROJECT NO (+2104) DATE 1,200 (63,006 6 July 2006 AIR PHOTO NO.	SITE NO ASPECT SLOPE ELEVATION THE	JU-35 100 Section (solipit, pad cut, etc.) Section Historic DEPTH m cm	SKETCH (X-SEC. TO SHOW SITE POSITION, INDICATE ORIENTATION AND SCALE) - V C (V) (V)	- medium brown sort colour - blow /cobbe /pethle are suborgular til	clarts; surface blacks are agailer	$E C_{XV}/Mb$				SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	poncave convex (straight) concave convex straight	uni (irr num ben) ter rid (gui) sca	BOULDERS BLOCKS BEDROCKOUTCROP HYDRO, CHAR. B ( ) ( ) c s 0 a 20 0 Well 50 0	PHOTOS rol no. description = 200 Atrun break in the	SAMPLES	

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MATERALDESCRIPTION	CHARACTERISTICS	DRIZON: thickness 7 cm absent BHORIZON: thickness cm	🗸 (absent Bo Bi Bih Big Bgi Bm	C horizon monthow halow darate of B and/or C pedogenic concentration:	absept some abundant to at cm base at cm	RAINAGE: r(w)m i p v	OAL MATERIALS	G. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	gravel Esond C		Cit: sharp or gradationar, honzonial or wavy	bhs	CT: sharp or gradational; horizontal or wavy	the second se	the following for turneethered surface material if no earlies use B however to contract.	BEDDING/STRATIFICATION MATRIX TEXTURE	TS: UO CLAST. ROUNDNESS. A SA SA NA	ABUNDANCE PEBBLES COBBLES BOULDERS	soLIDATION COHESION INDURATION OXIDATION OXIDATION O	DEV OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK	1, with 2, any ill a card to be . (1) 2 3 0	CUT 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Verytation i CR	
	SOIL					SILO	HUNS	STRAT				ź	CONTA				% CLA	CLAST BY SIZE	CON high a	ТОНЦТ	AV.			
PROJECT NO. (HAIMA) DATE AIR PHOTO NO.		OILE DESCRIPTION	SITE NO. ASPECT . SLOPE . % ELEVATION (m) ft.	UU-24 PLAT Typical Mir/max 12.05	SITE DESCRIPTION (soil pil, road out, etc.) SECTION HT/PIT DEPTH (m) cm S C C r D 2 (12)	N: 70/5654	SKETCH (X-SEC. TO SHOW SHE POSITION; INUCATE OBJENIATION AND SCALE)	- FLAT (MICRO-IRRELAIDE) PSUEDO-ALLUMAL/FC THEREDIS INITY ~ 17 - HICH FTCARAGENT	~ LOW N. OF STREAM	I some is brock of signer ARL on Schul,	- U KISIN R UNDER SUCKARCE	- 20 the out the way - with 50	The real first water and the presence	- STREAM TO THE DURCHER	ş 	SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave convex straight	HILLELOPE CONFIG. DOM.VEG. & MOISTURE INDICATOR PLANTS uni irr hum ben for nid gui sea wills of dwaf bord, Alvaluar, Peper	BOULDERS BLOOKS BEDROCK OUTCROP HYDRO. CHAR. a c/s)o a crk o a c/s o / V/		(3) 9:30 (2) CARPYWERT (3) NEW UP VIELLET	SAMPLES		

		MATERIAL	DESCRIPTION	
SOIL	CHARACTERIS	STICS		
LFH LFH	IORIZON: thickne	ss <i>IO</i> cm absent	AE #HORIZON: thick absent Bc Bf Bh	iness 7 cm Bin Bg Bgi Bm
Band	for C hodzon mottles	e halow danih of cm	B and/or C pedoge	nic concentration:
	absent som	e abundant	top at cm; b	ase atcm srate high ·
SOIL	DRAINAGE: r w	v d I		
RUS	FICIAL WATER	ALS		
STRA	TKG. UNIT	THICKNESS (m)	OVERALL TEXTURE	ORIGIN
<b>1</b>		et.	Sondy Sift	0+ Allumum
-	-	suq		
CONT	ACI: sharp of g	radational; horizontal o	r wavy	
<u>,                                    </u>	)		Sandy Srevel	Σ
<b>1</b>	0	bns	some sult(?)	- -
CONT	ACT: sharp or g	radational; horizontal o	r wavy	
		suq		
Comple	te the following for u	inweathered surface mater	tal if possible, otherwise use B	horizon (weathered)
4 * 0	BEDDING/ <u>STR</u> /eil mod.well mo	ATIFICATION d. weak massive	MATRIX TEXTURE Soundery SILA	
% CLA	ISTS: 15		CLAST. ROUNDNESS: A	SA R WR
CLAST		PEBBLES	COBBLES	BOULDERS
		ۍ د ه ه	a coo	. a o s o o
<b>Ö</b>	NSOLIDATION	COHESION		
hộn	mod slight non	high mod slight from	high mod slight non	high mod slight non
ГШНО	DIGY OF COARSI	E FRAGMENTS RGIGUA CEDUS UN IT	WEATHERING OF CI	ASTS/BEDROCK 3 D
TERR	AIN UNIT SYMBOL	for vicinity of site	REPRESENTS POLYGON?	YES NO
•	Qu. A.	o KARPO	ADD. NOTES IN FIELD BOC Vegebeter C	N CON

+ DCM ~ 10cm (Jen 2665 325 ELEVATION m. ft. BUCH DOM. VEG. & MOISTURE INDICATOR PLANTS HYDRO. CHAR. いたのかい SLOPE CONFIG. (ACROSS SLOPE) concave convex straight ALTERN. BALLWAL meedow - valley bother E - CY43453 N - TOI 5547 SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) SAND/ORDUE L SLOPE ° <sup>©</sup> O - - - - - Min/max BEDROCK OUTCROP a c s o Ø AIR PHOTO NO. SITE DESCRIPTION af Ao Δ ASPECT . FLAT 3% DATE July 6 '06 **a** c s o **b** SITE DESCRIPTION (soil pit, road cut, etc.) HILLSLOPE CONFIG. BLOCKS SLOPE CONFIG. (DOWN SLOPE) concave convex straight PHOTOS roll no. description والعرين 200(63,06 PROJECT NO. (+area) a c s o Ø SITE NO. BOULDERS SAMPLES

high mod slight hon CLAST. ROUNDNESS: A /SA)SR R WR complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) a c s O BLHORIZON: thickness cm absented Bf Bh Bfh Bg Bgj Bm BOULDERS OXIDATION WEATHERING OF CLASTS/BEDROCK ADD. NOTES IN FIELD BOOK? (YES) NO g B and/or C pedogenic concentration: Sard, Some Filt  $\leq$  $\bigcirc$ REPRESENTS POLYGON? (YES' NO none moderate high 5 ORIGIN \_cm; base at\_\_ high mod slight non description ERMUDESCRIPTION: OVERALL TEXTURE greadly said silly against COBBLES INDURATION MATRIX TEXTURE top at CONTACT sharp or gradational; horizontal or wavy or wavy ŝ high mod slight from bus 0, 30 gradational; horizontal cm absent who and lacour with PEBBLES BEDDING/STRATIFICATION THICKNESS (m) COHESION B and/or C horizon mottles: below depth of\_ TERRAIN UNIT SYMBOL for vicinity of site OV 1895 NV absent some abundant SQIL'DRAINAGE: r w m(1)p v SOIL CHARACTERISTICS (in SURFICIAL MATERIALS suq LFH HORIZON: thickness \$ high mod slight (nor) CONTACT: sharp or CLAST. ABUNDANCE BY SIZE CONSOLIDATION STRATIG: UNIT % CLASTS:  $\overline{\mathbf{C}}$ 

C saturated ŝ ELEVATION (1) ft. -2400 DOM. VEG. & MOISTURE INDICATOR PLANTS 3 20 huaist slove HYDRO, CHAR. 8 SLOPE CONFIG. (ACROSS SLOPE) 518 and blad concave convex straight SKETCH (X-SEC, TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) Ē Ac SECTION HT/PIT DEPTH m buried The growedy soul some self 701/261 E: 443442 BEDROCK OUTCHOP to the of pit AIR PHOTO NO. SITE DESCRIPTION SLOPE % to win up - oppend to pussibly be surface museums (solidan?, When'so CX/OV/Mb LOCATION bos why 2006 330° NW PHOTOS NOI no. description - purkely Cx/Mb flotter 1 BLOCKS SITE DESCRIPTION (soil pit road cut, etc.) (un) Irr hum ben ter rid gul)sca SLOPE CONFIG. (DOWN SLOPE) ASPECT ° concave convex (straight) Beduck experin DATE crest if PROJECT NO, (+area) 200 63.00 JD-36 BOULDERS a) a) SAMPLES SITE NO.

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	MATERIAL D	DESCRIPTION	
SOIL CHARACTERI	stics		•
LFH HORIZON: thickne	iss 7 cm absent	B HORIZON: thic absent Bc Bf Bh	thess cm Bith Bg Bgj Bm
B and/or C horizon mottle: absent) som	s: below depth ofcm neabundant	B and/or C pedoge top atmuit	nic concentration: ase atcm arate frigh
SOIL DRAINAGE: r w	@ T b v		
SURFICIAL MATERI	Also and a set		
STRATIG. UNIT	THICKNESS (m)	OVERALL TEXTURE	ORIGIN
	Suq	025	X
CONTACT: sharp or g	gradational; horizontal or	wavy	
	suq	•	
CONTACT: sharp or g	gradational; horizontal or	маvу	
	sug		
Complete the following for u	unweathered surface materi	al if possible, otherwise use B	horizon (weathered)
BEDDING/STF well mod. well mo	ATTIFICATION	MATRIX TEXTURE Silfy Same	
% CLASTS: \5		CLAST, ROUNDNESS: (A	SA SR R WR
CLAST. ABUNDANCE BY SIZE	PEBBLES	COBBLES a 🙆 。	BOULDERS
CONSOLIDATION	contestion	INDURATION high mod slight from	OXIDATION high mod slight non
LITHOLOGY OF COARS	E FRAGMENTS	WEATHERING OF C	ASTS/BEDROCK
TERRAIN UNIT SYMBOL	for vicinity of site	REPRESENTS POLYGON ADD. NOTES IN FIELD BO	2 (YES) NO DK? (YES) NO
a a se			

200-ELEVATION (m) ft. H-H B B 22 DOM. VEG. & MOISTURE INDICATOR PLANTS 504 - HYDRO, CHAR. moth slight LO CATION: SECTION HITPIT DEPTH m C 50 SLOPE CONFIG. (ACROSS SLOPE) - Some blocks from R above (CK)-discontinuous concave convex straight 0+0; 5 82.7 . J SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) ert of hit guesta tow willow SLOPE % // SUPE % // 18 // 18 // BEDROCK OUTCROP - small (0,00 die) store boils ready AIR PHOTO NO. - possible other this layer Que She. SITE DESCRIPTION saultin terrine to lost site - Leaded hutton (124 hr 5:14) within the gg si -Beduck of 50m 45 1200163.006/6 July 2006 BLOCKS a c s 1 you HILLSLOPE CONFIG. unl irr hum (be) ter rid (gul)sca SITE DESCRIPTION (soil pit) road cut, etc.) SLOPE CONFIG. (DOWN SLOPE) concave convex straight ASPECT . PHOTOS roll no. description DATE PROJECT NO. (+area) 1237 BOULDERS 8 5 BO SITE NO. SAMPLES

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MANNEWAR	DESCRIPTION	
SOIL CHARACTERISTICS		
LFH HORIZON: thickness 2 cm absent	B HQRIZON: thickness · absent Bs Bt Bh Bit Bg B	gi Bm
B and/or C horizon motiles: below depth ofcm absent some abundant	B and/or C pedogenic concent top atmone_ate	ation: 
SOIL DRAINAGE: r w m i p v		
SURFICIAL MATERIALS		
STRATIG. UNIT THICKNESS (m)	OVERALL TEXTURE ORIGIN	
	silty sond N	
CONTACT: sharp or gradational; horizontal c	r wavy U	
suq	-	
CONTACT: sharp or gradational; horizontai o	r wavy	
seq.		-
Complete the following for unweathered surface mate	rial if possible, otherwise use B horizon (we	thered)
BEDDING/STRATIFICATION well mod. well mod. weak massive	MATRIX TEXTURE	
% CLASTS: 15	CLAST. ROUNDNESS: A BA SH	R WR
CLAST ABUNDANCE PEBBLES BY SIZE	cossles soul a 6 s o a c	é O
CONSOLIDATION COHESION high mod slight from	INDURATION OXID/ high mod slight non high mod	non heis
LITHOLOGY OF COARSE FRAGMENTS	WEATHERING OF CLASTS/BEDI	QCK
TERRAIN UNIT SYMBOL for vicinity of site	REPRESENTS POLYGON? (YES) N	
gas Mb (sou due)	ADD. NOTES IN FIELD BOOK? (YES)	ę,

ELEVATION (m) ft. DOM. VEG. & MOISTURE INDICATOR PLANTS molit lites HYDRO CHAR. Ded out, alco) SECTION HT, PIT DEPTH m (cm) 55 CATION N: 70(5652 SLOPE CONFIG. (ACROSS SLOPE) concave convex straight SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) mas, and tweeks SLOPE 。 Winy Typical Minymax BEDROCK OUTCROP af AIR PHOTO NO. SITE DESCRIPTION DATE bATE baty 2006 medium burne son ASPECT . 340° N BLOCKS a c bo und it hum ben ter rid gul sca SITE DESCRIPTION (soil pit road out, atc.) SLOPE CONFIG. (DOWN SLOPE) concave convex straight HILLSLOPE CONFIG. PHOTOS roll no. description R Ø fegosel 1200163.006 JUL a c ( ) o ( - ) PROJECT NO. (+area) D-38 BOULDERS SAMPLES SITE NO.

MATERIAL DESCRIPTION	Band/or C horizon motiles: balow depth of cm     B HORIZON: thickness cm       B and/or C horizon motiles: balow depth of cm     B and/or C pedogenic concentration; top at cm	SCIL: DRAINAGE: r W(m) i p v SUBEICIAL MATERIAIS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN (C?)	CONTACT: sharp or gradational; horizontat or wavy	CONTACT: sharp or gradational; horizontal or wavy bins Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered)	BEDDING/STRATIFICATION well mod. weak massive % CLASTS: CLAST: CLAST: CLAST: ROUNDNESS: (A) SA SH R WR	LUCASI. ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE (a) c s o (c s o consolination) CONSOLIDATION COHESION INDURATION OXIDATION high mod slight from high mod slight from high mod slight from the mod slight from high mod slight from the mod slight	Werk (graphin) shak ( 2 3 0 TEFRAIN UNITSYMBOL LOTVICING OF ADD. NOTES IN FIELD BOOKT (E) NO QSMD (C?) ADD. NOTES IN FIELD BOOKT (E) NO	
PROJECT NO. (+area) DATE AIR PHOTO NO.	SITE DESCRIPTION NTE NO. ASPECT SLOPE SLOPE STUDIE ASPECT SLOPE STUDIE ASPECT SLOPE STUDIE ASPECT SLOPE STUDIE ASPECT STOP ASPECT SLOPE STUDIE ASPECT STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT SLOPE STOP ASPECT STOP ASPECT SLOPE STOP ASPECT STOP ASPECT SLOPE STOP ASPECT STOP ASPE	N: 7015399 SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) - Regrossed 10 (a ch soul			SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE) concave convex straight concave convex straight	HILLELOPE CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS (uni) Irr hum ben ter rid gui sca frace IN14, VPDM (INI.M) BOULDERS BLOROCK OUTCROP HYDRO. CHAR. a c s () a c o a c o Or y Moro.	DIDICE roll no. description DIDICE C.R. driggery pit SAMPLES	

MATERIAL DESCRIPTION	Soll CHARACTERISTICS LFH HORIZON: thickness cm absent BHORIZON: thickness cm $\frac{BHORIZON: thickness cm}{2 H 2 cm}$	B and/or C horizon motiles: below depth of cm B and/or C pedogenic concentration: absent some abundant top at cm; base at cm hone moderate high	SOIL DRAINAGE: r w m i p 🖉 SURFICAL MATERIALS STRATIG. UNIT THICKNESS (m) OVERALL TEXTURE ORIGIN	(m) prest O	CONTACT: sharp or gradational; horizontal or wavy	CONTACT: sharp or gradational; horizontal or wavy	Dhs	Complete die knowing for unweatnered sunace materia if possible, otherwise use B horizon (weathered) BEDDING/STRATIFICATION	well mod well mod waak (massive)	% CLASTS: CLAST ROUNDNESS A SA SA R WA	CLAST. ABUNDANCE PEBBLES COBBLES BOULDERS BY SIZE a c s o a c s o a c s o	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION Ingh mod_slight-non high mod_slight-non	LITHOLOGY OF COARSE FRAGMENTS WEATHERING OF CLASTS/BEDROCK	TERRAIN UNIT SYMBOL LOT VIGINITY OF SILE REPRESENTS POLYGON? (TES) NO PON-ZP ADD. NOTES IN FIELD BOOK? (TES) NO VEG CR
PROJECT NO. (+ERIFER) DATE AIR PHOTO NO.		JD-40 FLAT Typical Minimax 483 ITE DESCRIPTION (soil phi, road out, alc) SECTION HITVEIT DEPTH m (50) 42 (Avid QULQUV 0.1, 4710) E: 444 902	KETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) - Top it 3rd palsa furm up-valley (ulestecn	Plats 1) - Plats	W W . FROZEN				SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACROSS SLOPE)	concave copvex straight	HILSLOPE CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS uni irr hum ben ter rid gui sca 5,0 h. 1,000 m m 1,000 h. 1,000 h. 1,000 h.	BOULDERS BLORCK OUTCROP HYDRO. CHAR.	ADTOS roll no. description with 13:03 - pals how 2039	WINTLES (2) 1 (2)

skerch (x-sec. to show sil - top of 3vk polsa is -HILLSLOPE CONF uni irr hum ben ter ric BHOTOS TOIL TO description SLOPE CONFIG. (DOWI concave copwex si BOULDERS

MATERIAL DESCRIPTION	LFH HORIZON: thickness UrS cm absent BHORIZON: thickness cm absent BC Bh Bh Bh Bg Bgi Bm	B and/or C horizon motiles: below depth ofm B and/or C pedogenic concentration: top atm; base atm and and top atm; base atm and andm andm and an	SOIL DRAINAGE: r Wm I P V SUREICIAL MATERIALS	( ) and thickness (m) OVERALL TEXTURE ORIGIN	CONTACT: sharp or gradational; horizontal or wavy	Dhs bhs CONTACT: sharp or gradational: horizontai or waxv	Dns Commission the following for revenues of under a state of the stat	well mod well mod weak hassive survey to still the standard of the standard wastrated)	% CLASTS:     [5]     CLAST. ROUNDNESS:     A SA SR R WR       CLAST. ABUNDANCE     PEBBLES     COBBLES     BOULDERS       BY SIZE     (a) s o     a(b) s o     a c s (b)	CONSOLIDATION COHESION INDURATION OXIDATION OXIDATION high mod slight from high mod slight from high mod slight from high mod slight from the the slight from	TEARAIN UNIT SYMBOL for vicinity of site REPRESENTS POLYGON? (ES) NO Q.S. M.D.R. ADD. NOTES IN FIELD BOOK? (ES) NO Q.S. M.D.R. ADD. NOTES IN FIELD BOOK? (ES) NO	
					· .	£ 		· ·				
PROJECT NO. (+4704) DATE AIR PHOTO NO.	SINE DESCRIPTION SITE NO. ASPECT SIZE SLOPE STUN A ELEVATION A 4.	U-4/ 20 NW Typical Minhax 62 SITE DESCRIPTION (soliph) read out, etc.) SECTION HT/PIT DEPTH m 55	VOUT F W: 70(4790 SKETCH (X-SEC. TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE)	med. grey colone		· · · · · · · · · · · · · · · · · · ·		SLOPE CONFIG. (DOWN SLOPE) SLOPE CONFIG. (ACHOSS SLOPE) concave convex straidht	HILLSLOPE CONFIG. DOM. VEG. & MOISTURE INDICATOR PLANTS	BOULDERS BLOCKS BEDROCK OUTGROP HYDRO. CHAR. a o (3) o B o (3) o B o (3) o A M 5 (17) C PHOTOS roll no. description	(1) 14:36 - Lookin book at site 41 from actors argue creat samples	

high mod slight (non) CLAST, ROUNDNESS: (A SA) SR R WR a o s (0) Complete the following for unweathered surface material if possible, otherwise use B horizon (weathered) BOULDERS BHORIZON: thickness cm Absent Bc Bf Bhr Bih Bg Bgi Bm OXIDATION WEATHERING OF CLASTS/BEDROCK (F) 1 2 3 D ADD. NOTES IN FIELD BOOK? (YES) NO B and/or C pedogenic concentration:  $\leq$ REPRESENTS POLYGON? YES NO none moderate high ORIGIN \_\_cm; base at\_\_\_ Sand, tr si It いいてちちろう high mod slight (non) MATERIAL DESCRIPTION Browly Sail OVERALL TEXTURE blacky MATRIX TEXTURE a (Os o INDURATION COBBLES top at gradational; horizontal or wavy CONTACT: (sharp) or gradational; horizontal or wavy ŝ high mod slight (not) cm absent discurt. bus + 50 Wwell mod. well mod. weak massive THICKNESS (m) (a) c s o COHESION PEBBLES B and/or C horizon mottles: below depth of TERRAIN UNIT, SYMBOL for vicinity of site LITHOLOGY OF COARSE FRAGMENTS absent some abundant / as Mb /R SOLDRAINAGE: I W M I P.V. SOIL CHARACTERISTICS Sug LFH HORIZON: thickness **VTERIALS** 1 H-65 M high mod slight (hon) CONTACT: sharp or CLAST ABUNDANCE BY SIZE CONSOLIDATION STRATIG, UNIT % CLASTS: L'A ELEVATION (m) ft. DOM. VEG. & MOISTURE INDICATOR PLANTS HYDRO. CHAR. dry 5 22 8 SLOPE CONFIG. (ACROSS SLOPE) () 14:59 . View up comput compan pour 2)42 1914 concave /convex straight - numerous auteraps in this area s, up - transistin uplage from discont. M + SKETCH (X-SEC TO SHOW SITE POSITION; INDICATE ORIENTATION AND SCALE) SECTION HT /PIT DEPTH BEDROCK OUTCROP er 442625 Typical Min/max (a) e a e AIR PHOTO NO. SITE DESCRIPTION SLOPE ° % -or lobe above conyon -Scorp = Cx/Mb/R C LOCATIN: 6 July 2006 BLOCKS 075°E SITE DESCRIPTION (soil pit, road cut, etc.) unt in hum ben ter rid gut sca SLOPE CONFIG. (DOWN SLOPE) deeps freem cut scarp ASPECT ° concave donvex straight PHOTOS roll no. description DATE -regasof PROJECT NO. (+area) 1200163,006 a c a JD-47\_ BOULDERS SAMPLES SITE NO.