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Kangan Project - Gold Targets Identified in West Pilbara Sediments

6 October 2017, Pioneer Resources Limited ("Pioneer" or the "Company" (ASX: PIO)) is pleased to update the market with a summary of findings at its 100%-held Kangan Project (E45/4948, E47/3318-1 and E47/3321-1), located in the western Pilbara region of Western Australia.

- Kangan Project considered prospective for sediment/conglomerate-hosted gold;
- **Rock chips of up to 2.73 g/t gold** returned in previous exploration programmes;
- Pioneer will complete further reconnaissance mapping, sampling and prospecting within the Kangan tenements as a priority; and
- Kangan Project, located 80 km south of Port Hedland (see Figure 1), comprises 2 granted exploration licences and one exploration licence application covering an area of 268km². The Eastern-most tenement application abuts the Wodgina Lithium Mine tenements.

Pioneer was attracted to the project because of the wide-spread gold anomalism recorded in the past exploration record within the project's south western and northern tenement areas (Refer to figures overleaf) as well as its lithium prospectivity.

Gold Targets Associated with Fortescue Group Sediments (South-western (within E47/3321) targets are shown on Figure 2)

- Target 1: **Rock chips up to 2,730ppb (2.73 g/t) Au** recorded with anomalous gold in soils forming a 0.85 km long target, supported by anomalous stream sediment geochemistry values up to 254ppb Au;
- Target 2: Gold in soils anomaly (**peak value 2,640ppb (2.64 g/t) Au**) over 0.65 km at the base of felsic volcanoclastic conglomerate and pebbly sandstone; open to the north;
- Target 3: Gold in soils (**peak value 2,654ppb (2.65 g/t) Au**) anomaly over 3km, striking sub-parallel to multiple stratigraphic units open to the north east;
- Project rock-types include the Fortescue Group (Mallina formation, Constantine sandstone/conglomerate and Honeyeater basalt) and Cleaverville Formation BIF; and
- Numerous gold workings, likely alluvial but requiring further study, also observed in the field

Kangan Project Provides Exposure to the Emerging West Pilbara Sediment-hosted Gold Province

The area held by Pioneer is adjacent to the areas held by Novo Resources Group; and De Grey Mining Limited in joint venture with Kirkland Lake Group. Pioneer has now undertaken a review of data focusing on the potential for Archean sediment-hosted gold (including conglomerates), which lie within the south-western Kangan Project tenement. This included a field trip to known gold occurrences, as well as soil geochemistry sampling. The site visit also located lithium-prospective pegmatites near the Wodgina Lithium Mine.

Pioneer staff will be on site again this quarter to conduct further reconnaissance mapping, sampling and prospecting. One of the aims of the work will be to establish the host rock/s for in-situ gold mineralisation.

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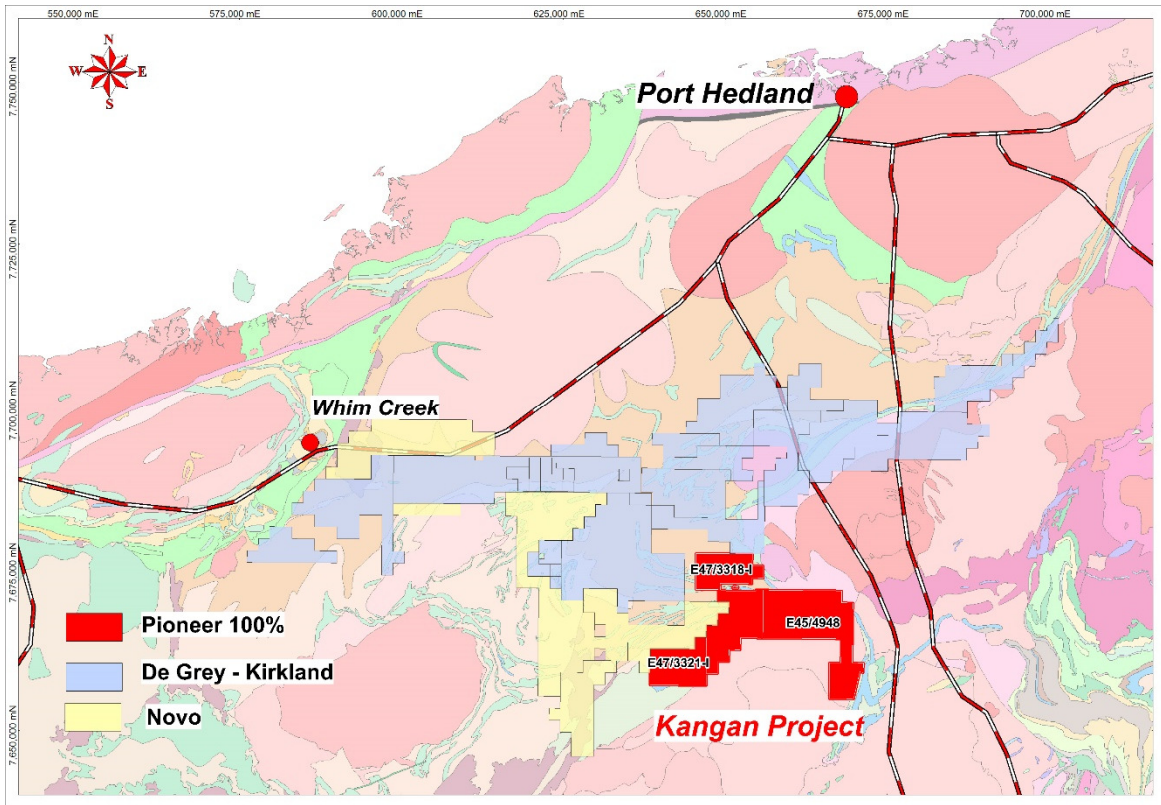


Figure 1. The location of the Kangan Project is 80 km immediately south of Port Hedland and abuts tenements held by Artemis Resources Limited with Novo Resources Group; and De Grey Mining Limited with Kirkland Lake Group; (overlying 1:500,000 GSWA geological map.)

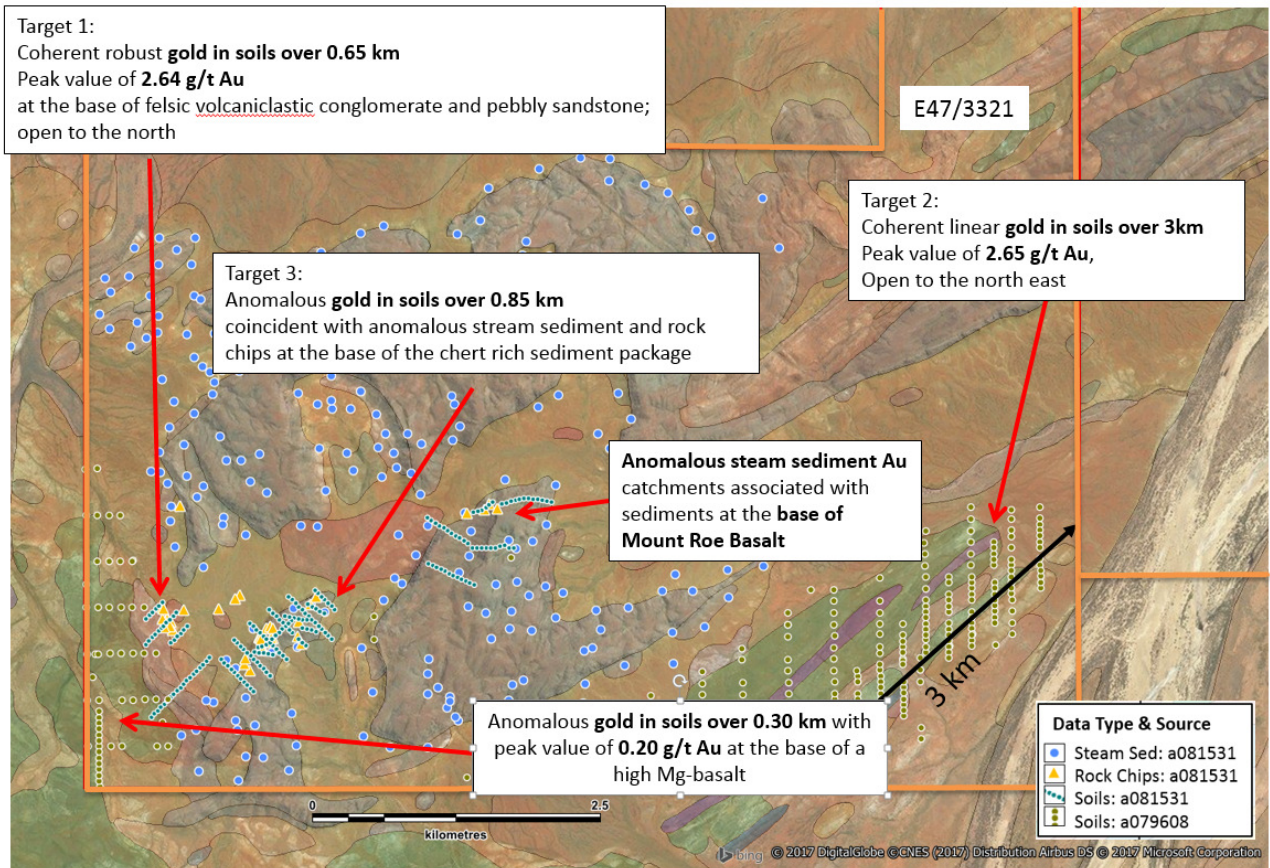


Figure 2. Initial Kangan Project gold targets within the south western portion of the Project area, within E47/3321. Anomalies have been generated using established datasets, as referenced.

About Pioneer Resources Limited

The Company's strategy is to actively explore for key, global demand-driven commodities in highly prospective geological domains, in areas with low geopolitical risk and with established infrastructure.

The Company's portfolio includes high quality alkali metal (Li, Cs, Ta) assets in Canada and WA, plus strategically located gold, nickel and cobalt projects in mining regions of Western Australia.

The Company remains committed to bringing its 100% owned Sinclair Zone Caesium Project into production in the first half of 2018. Pioneer will release updates in due course on the next phase of drilling, and progress towards development of the Sinclair project including, in due course, the grant of the mining lease, and the off take contract for the high value pollucite product. This development will be undertaken in conjunction with an initial work programme on the gold-in-conglomerate potential of the Kangan project in the Pilbara region.

Competent Person

The information in this report that relates to Exploration Results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a full time employee of Pioneer Resources Limited and a member of The Australasian Institute of Mining and Metallurgy (member 105893) and the Australian Institute of Geoscientists (member 6034). Mr Crook has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Crook consents to the inclusion of the matters presented in the announcement in the form and context in which they appear.

REFERENCES ON WAMEX

A No.:	79608
Title:	Yandeyarra Project, Annual Report for the period 27/07/2007 to 26/07/2008, E47/1710.
Operator(s):	PRIMARY RESOURCES LTD
A No.:	81531
Title:	Yandeyarra Project, Annual Report for period 1 January 2008 to 31 December 2008
Operator(s):	CHALICE GOLD MINES LIMITED

a081531 rocks							
Designation		MGA_E	MGA_N	SAMPLETYPE	Ag_ppm	As_ppm	Au_ppb
GCH_DEG_2008	550264	640051	7658292	ROCK	0.15	22	2730
a079608 Soils							
Sample_No		AMG_E	AMG_N	Sample_Type			Au_ppb
Y13739		645000	7657600	-80# Soil			2654
Y13610		644600	7657400	-80# Soil			1006
Y13692		645800	7658200	-80# Soil			873
a081531 soils							
Hole_ID	SampleID	MGA_E	MGA_N	SAMPLETYPE	Ag_ppm	As_ppm	Au_ppb
GCH_DEG_2008	YLD4560	639165	7658442	SOIL	0.15	5.8	2640

Table 1. Significant gold assay results

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Kangan Project:

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut Faces, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. 	<ul style="list-style-type: none"> Soil geochemistry sampling refer to WAMEX reports - a079608 & a081531. Rock chip sampling refer to WAMEX report - a081531. Stream sediment sampling refer to WAMEX report - a081531
	<ul style="list-style-type: none"> Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	<ul style="list-style-type: none"> It is assumed that industry standard practice for soil, stream sed and rock chip sampling measures were taken. Refer to WAMEX reports - a079608 & a081531.
	<ul style="list-style-type: none"> Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Soil, stream and rock chip geochemistry: nominal 40g samples were sorted, dried, split and whole sample pulverised in a vibrating disc pulveriser. Samples were digested with Aqua Regia in a mixture of Nitric and Hydrochloric acid, the digest is diluted, mixed and an aliquot of the acid solution take and analysed directly by ICP-MS or OES for gold and other elements. BLEG stream sediments were 2kg and tumbled for 24 hours in a 0.1% Sodium Cyanide solution maintained at a pH of 10. After settling, an aliquot of the supernatant liquor is taken and analysed for gold by ICP-Mass Spectrometry All samples have been assayed by Ultra Trace. Refer to WAMEX reports - a079608 & a081531.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> No drilling undertaken.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. 	<ul style="list-style-type: none"> No drilling undertaken.
	<ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. 	<ul style="list-style-type: none"> No drilling undertaken.
	<ul style="list-style-type: none"> Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> No drilling undertaken.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	<ul style="list-style-type: none"> No drilling undertaken.
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, Face, etc) photography. 	<ul style="list-style-type: none"> No drilling undertaken.
	<ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> No drilling undertaken.

Criteria	JORC Code explanation	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	<ul style="list-style-type: none"> Soil sampling: The sample is sieved to the desired fraction in the field. Rock chips were presented to the laboratory 'as-is'.
	<ul style="list-style-type: none"> Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
	<ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
	<ul style="list-style-type: none"> Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
	<ul style="list-style-type: none"> For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
	<ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Standards and laboratory checks have been assessed. Most of the standards show Refer to WAMEX reports - a079608 & a081531
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	<ul style="list-style-type: none"> Not at this stage of the project development.
	<ul style="list-style-type: none"> Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
	<ul style="list-style-type: none"> Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The Company has not adjusted any assay data,
<i>Location of data points</i>	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	<ul style="list-style-type: none"> No drilling was undertaken. Soil and rock chip locations via handheld GPS units.
	<ul style="list-style-type: none"> Specification of the grid system used. 	<ul style="list-style-type: none"> GDA94 Zone 50.
	<ul style="list-style-type: none"> Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Fit for purpose.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 	<ul style="list-style-type: none"> Soil samples: as indicated on map Rock chips: Random at selected outcrop locations dependent on geology.
	<ul style="list-style-type: none"> Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. 	<ul style="list-style-type: none"> No.
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<ul style="list-style-type: none"> No.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Soil and rock chip geochemistry: Possibly gives an indication of the strike direction of individual anomalies.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites 	<ul style="list-style-type: none"> The sampling reported herein is within 47/3321, which is a granted exploration licence. The tenements are located approximately 77km S of Port Hedland, WA. Title is registered in the name of Pioneer Resources Limited. The exploration licence is within an area of Native Title claimed land by the Kariyarra People.
	<ul style="list-style-type: none"> The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> At the time of this Statement the exploration licence is in Good Standing. To the best of the Company's knowledge, other than industry standard permits to operate there are no impediments to Pioneer's operations within the tenement.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> This report refers to data generated by Chalice Gold Mines Limited (refer WAMEX for report a081531 and Primary Resources Limited a079608).
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Sediments that are prospective for gold.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> No drilling was undertaken.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Refer to WAMEX reports - a079608 & a081531
Relationship between mineralisation	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	<ul style="list-style-type: none"> Soil and rock chip sampling provides a point at surface and does not relate to any drilling widths or intersections.

Criteria	JORC Code explanation	Commentary
<i>widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Refer to maps and figures in this report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> Not relevant to soil sampling and rock chip sampling.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> All meaningful and material exploration data has been reported.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Mapping, soil sampling, stream sediment sampling, and drilling.