



ABN: 44 103 423 981  
Tel: +61 8 9322 6974  
Fax: +61 8 9486 9393  
email: dcrook@PIOresources.com.au

Address: 21 Ord Street  
West Perth Western Australia

Postal: PO Box 1787  
West Perth  
Western Australia 6872

15 August 2011

ASX/Media Announcement

---

# Pioneer posts maiden resource of 185,600oz Au at Mt Jewell Project

---

- Estimate at this stage includes Hughes & Tregurtha deposits only, defined to JORC Mineral Resource standard - further updates will be provided
  - Mining studies for Hughes & Tregurtha to now be accelerated, including:
    - Economic - identify priority areas for resource category upgrade drilling and trial mining options
    - Core drilling - provide high-quality samples for metallurgical test work and pit wall stability data
    - Environmental - baseline studies to plan for future rehabilitation
  - Exploration drilling planned to resume by the end of September 2011. Targets at Mt Jewell include Airstrip, Criterion, Wild Dog and Hughes West; and the first Pioneer holes into the exciting new Juglah Dome Gold Project.
- 

Pioneer Resources Limited (ASX: **PIO**) is pleased to report a maiden JORC reportable in-situ Mineral Resource estimate of 3.78 million tonne at a grade of 1.53g/t Au for 185,600oz Au for its Mt Jewell Project, located 55km north of Kalgoorlie, WA. Of this total, 131,600oz Au or 71% is categorised as Measured or Indicated Mineral Resource. This information is shown in more detail in Tables 1 and 2.

A higher grade subset comprises **1.3 million tonne at 2.39g/t for 99,500oz Au**. The Company's initial mining studies will focus on this higher grade material and more shallow parts of the in-situ Mineral Resource. The estimate announced today represents the first step in Pioneer's strategy to build a 500,000oz inventory, which the Company believes could then underpin a stand-alone mining operation at Mt Jewell, providing for a minimum seven-year operating life.

"I consider that this initial Mineral Resource is an excellent achievement in a relatively short period of time, and is the direct result of our strong commitment to gold exploration and belief in Mt Jewell. We now have a very important platform from which to grow the business and we intend to follow up a number of new targets with aggressive drilling programs over the next year to build upon this foundation," Pioneer's Managing Director David Crook said.

The Mineral Resource was estimated by independent consultants CSA Global using data from 22,000m of resource definition drilling undertaken by Pioneer since the first gold discovery was made at Tregurtha in September 2009.

The Mt Jewell Project is considered to be an open pit proposition with conventional carbon-in-leach extraction of gold. The location of the project benefits from nearby established mining infrastructure due to its close proximity to Kalgoorlie, and there are several major operating gold treatment facilities within a 75km radius, including those at Paddington, Kanowna Belle, Kalgoorlie and Coolgardie.

The Tregurtha and Hughes gold deposits are new, greenfields discoveries made by Pioneer in 2009. The Company's substantial commitment to gold exploration since then has resulted in the identification of a suite of other prospects and anomalies, which will be the subject of on-going active exploration with the objective of making further discoveries. The Mt Jewell Gold Project is a major holding comprising more than 750km<sup>2</sup> of tenements.

The Tregurtha and Hughes deposits are located along a NNW-trending shear in the south-west corner of the Rainbow Dam Granodiorite. The Rainbow Dam Granodiorite is a tear drop shaped body bound to the east by the Ringlock Dam greenstone belt and to the west by the Scotia Greenstone Belt. Further west is the nearby Scotia Dam Granodiorite, which hosts the Golden Cities and Federal Gold Mines.

### **Parameters**

The Mineral Resource estimate is based on 88 reverse circulation ("RC") holes in Hughes and 78 RC holes in Tregurtha. The drilling is primarily on 20x20m and 40x40m drilling patterns, expanding to a 50x50m patterns at depth.

The wireframes for lodes are modelled on geological interpretation. The mineralisation within these lodes has been delineated using lithology and a minimum gold grade of 0.5g/t. A 1m composite data set for individual lodes was used for variography analysis and estimation. For continuity purposes, adjacent drill holes and sections were used to refine the geological relationship and to reduce the saw-tooth effect to the modelling.

A block model was created using 10.0mE × 10.0mN × 1.0mRL parent blocks. Ordinary Kriging was used to estimate 3D blocks. Quantitative Kriging Neighbourhood Analysis was used to optimise parameters for the Kriging search strategies.

The headline Mineral Resource of 185,600oz Au for the Tregurtha and Hughes Deposits has been reported for 3D blocks above a lower cut-of grade of 0.8g/t Au, sub-divided by weathering zones to provide for density variations.

A summary of the in-situ Mineral Resource, reported by incremental lower grade cut-offs, is shown in Table 1.

Table 2 subdivides the headline Mineral Resource by category.

<b>Cutoff</b>	<b>Tregurtha</b>		<b>Hughes</b>		<b>Total</b>		
<b>Grade</b>	<b>Tonnes</b>	<b>Au</b>	<b>Tonnes</b>	<b>Au</b>	<b>Tonnes</b>	<b>Grade</b>	<b>Au</b>
<b>(g/t)</b>		<b>(g/t)</b>		<b>(g/t)</b>		<b>(g/t)</b>	<b>(oz)</b>
0.0	3,824,000	1.01	2,033,000	1.54	5,857,000	1.19	224,800
0.5	3,334,000	1.10	1,949,000	1.59	5,283,000	1.28	217,500
0.6	2,967,000	1.17	1,877,000	1.63	4,844,000	1.35	210,000
0.7	2,555,000	1.25	1,772,000	1.69	4,327,000	1.43	199,000
<b>0.8</b>	<b>2,138,000</b>	<b>1.35</b>	<b>1,639,000</b>	<b>1.77</b>	<b>3,777,000</b>	<b>1.53</b>	<b>185,600</b>
0.9	1,738,000	1.46	1,497,000	1.85	3,235,000	1.64	170,600
1.0	1,395,000	1.59	1,359,000	1.95	2,754,000	1.77	156,500
1.1	1,115,000	1.72	1,218,000	2.05	2,333,000	1.89	141,900
1.2	901,000	1.86	1,092,000	2.15	1,993,000	2.02	129,400
1.3	744,000	1.99	969,000	2.27	1,713,000	2.15	118,300
1.4	611,000	2.13	870,000	2.37	1,481,000	2.27	108,100
<b>1.5</b>	<b>518,000</b>	<b>2.25</b>	<b>778,000</b>	<b>2.48</b>	<b>1,296,000</b>	<b>2.39</b>	<b>99,500</b>
2.0	244,000	2.85	432,000	3.08	676,000	3.00	65,100

	<b>Hughes</b>		<b>Tregurtha</b>		<b>Total</b>		
<b>Category</b>	<b>Tonnes</b>	<b>Au</b>	<b>Tonnes</b>	<b>Au</b>	<b>Tonnes</b>	<b>Grade</b>	<b>Au</b>
		<b>(g/t)</b>		<b>(g/t)</b>		<b>(g/t)</b>	<b>(oz)</b>
Measured	317,000	1.50	328,000	2.71	645,000	2.12	43,900
Indicated	969,000	1.32	906,000	1.60	1,875,000	1.46	87,700
Inferred	852,000	1.33	405,000	1.38	1,257,000	1.35	54,400
<b>Total</b>	<b>2,138,000</b>	<b>1.35</b>	<b>1,639,000</b>	<b>1.77</b>	<b>3,777,000</b>	<b>1.53</b>	<b>185,600</b>

*Note: Totals might not add due to the timing of equation rounding. The CSA Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 0.5g/t Au. Ordinary Kriging technique with high grade treatment (to reduce the influence of some very high grade samples) was used. The resource is quoted from blocks above the specified gold cut-off grade.*

Yours faithfully



**Managing Director**

Released by :	Further information:
Paul Armstrong	Mr David Crook
Read Corporate	Pioneer Resources Limited
Telephone: (+61-8) 9388 1474	Telephone: (+61-8) 9322 6974

## **Responsible Parties**

Responsible Parties in respect of the information within this release (which includes the report that the information is derived from) as it relates to geology and mineralization:

Based on the databases provided by Pioneer, CSA has produced the Mineral Resource estimates for Hughes and Tregurtha deposit, These Mineral Resources have been classified and reported in accordance with The 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Resource classification is based on the geological confidence and interpretation, data QAQC, drill spacing and geostatistical measures. It is CSA's opinion that the current Mineral Resource models provide robust global estimates of the in situ mineralisation of Au in the project.

### **CSA Global Pty Ltd (CSA)**

CSA Global Pty Ltd (CSA) is an Australian-owned company providing geological and mining consulting services to the mineral resource sector. The organisation is well resourced with an established office in Perth, Western Australia and has undertaken work for a number of substantial international mining houses. CSA comprise a team of technical professionals dedicated to providing excellence of service in their field of expertise. The CSA's independence is ensured by the fact that it holds no equity in any project. This permits the CSA to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The CSA have a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, Competent Persons Reports, independent audits and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. This report was prepared by consultants sourced from the CSA office in Perth (Australia). These consultants are specialists in the fields of Economic Geology, Project Analysis and Due Diligence, and Resource Evaluation.

### **Dr Bielin Shi (PhD, MSc, MAusIMM, MAIG) – Principal Geologist CSA**

Dr Shi of CSA is a geologist with high level experience in economic and mining geology, resource estimation and applied geostatistics. The information in this announcement that relates to Mineral Resources is based on information compiled by Dr Shi, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Dr Shi is a Competent Person as defined by the JORC Code (2004 Edition) and consents to the inclusion in this announcement of matters based on his information in the form and context in which it appears. . He conducted the field-based assessment of Pioneer' Mount Jewel Project and is the primary author for this report.

## **Warranties**

Pioneer has represented in writing to CSA that full disclosure has been made of all material information and that, to the best of their knowledge and understanding, such information is complete, accurate and true.

## **Reliance to other experts**

CSA has based this resource estimate report on information provided by Pioneer. This report relies on other experts for the description of project tenure, regional geology and environmental considerations. The report includes third party technical reports and relevant published and unpublished third party information. CSA has made all reasonable endeavours, including a review of the Pioneer data, to confirm the authenticity and completeness of the technical data on which this report is based, however CSA cannot guarantee the authenticity or completeness of such third party information.

The report author is not qualified to comment on any legal, environmental, political or other issues relating to the status of the Hughes and Tregurtha tenements, or for any marketing and mining considerations related to the economic viability of the Hughes and Tregurtha mineralisation.

## **About Pioneer Resources Limited**

Pioneer Resources Limited (ASX: PIO) is a specialist exploration company searching for gold and base metals in the Kalgoorlie District of Western Australia. The Company strives to create shareholder value by combining work on advanced projects with active project generation from within the Company's 100%-owned and joint venture tenement portfolio.

A summary of the Company's activities is presented in a fact sheet and other reports available from the Company's web site at [www.PIOresources.com.au](http://www.PIOresources.com.au).

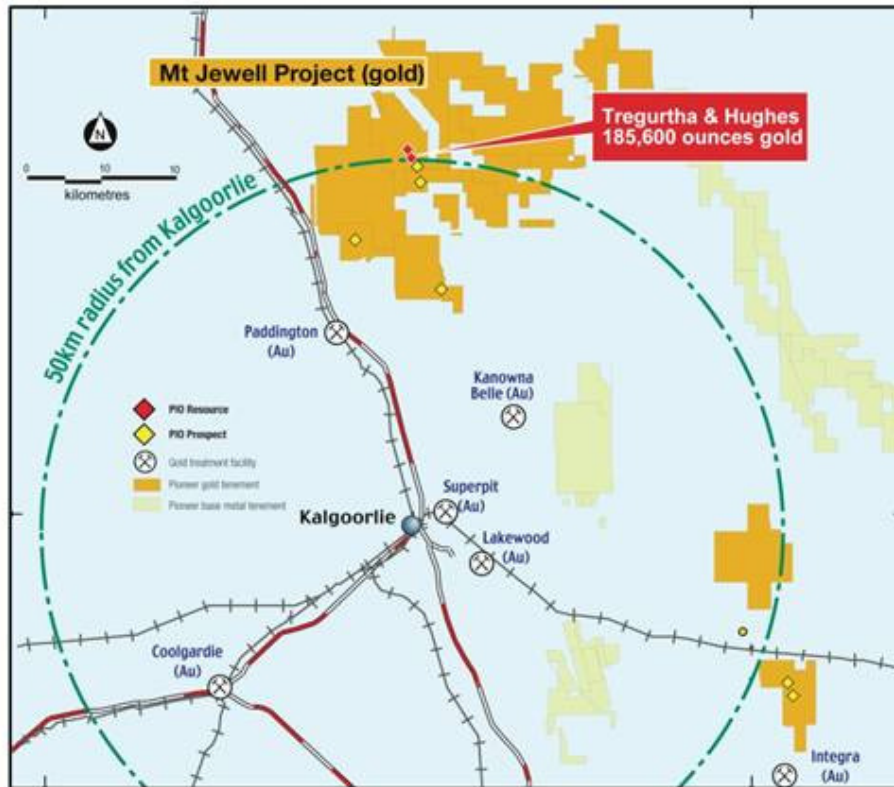


Figure 1: Mt Jewell Project area showing the location of the Tregurtha and Hughes Deposits, and active gold mining facilities.  
Figures 2 and 3: Cut-aways of the Tregurtha and Hughes Deposits.

