

1 September 2021

## 92 Energy Intersects Elevated Radioactivity at the Gemini Uranium Project

92 Energy Limited (92 Energy or the Company) (ASX: 92E) is pleased to advise it has intersected a zone of elevated radioactivity in its inaugural drilling program at the Gemini Project (the Project) in the Athabasca Basin, Saskatchewan, Canada (Figure 1).

# **Highlights**

- Drill hole GEM-004 intersected 5.3m of elevated radioactivity (>500 counts per second (cps)) as measured with an RS-125 hand-held spectrometer.
- The 5.3m interval of elevated radioactivity averages 760 cps and includes a 0.7m subinterval of stronger radioactivity (>1000 cps on an RS-125) that averages 1,500 cps.
- The intersection is approximately 190m below surface and is associated with a strong and broad zone of clay, hematite and quartz alteration, with common fault breccias and other structures.
- As GEM-004 is the first drill hole ever completed in this target area, the zone of elevated radioactivity is wide open, both on section and in plan view.
- Geochemical assay results for GEM-004 are expected within approximately four weeks to determine the extent of any uranium mineralisation.
- Seven new claims have been staked, adding approximately 122km<sup>2</sup> of prospective ground contiguous with the original Gemini Project area.
- Gemini is located 27km southeast of the McArthur River uranium mine, one of the largest and highest-grade uranium deposits in the world.

Note: All drill hole intervals are core lengths. True thickness has yet to be determined.

#### **Drill Hole GEM-004**

Drill hole GEM-004 targeted a VTEM conductor up-ice from radioactive bog samples, anomalous lake sediment samples and radioactive boulders. It was drilled along the southern edge of the Gemini Project (Figure 2) at an angle of -55 degrees towards 305 degrees and penetrated 37m of overburden followed by Wollaston Group. basement rocks through to the end of the drill hole at 327m. A 5.3m interval of elevated radioactivity (>500 cps on an RS-125 hand-held spectrometer) was intersected from 229.9m to 235.2m. The 5.3m interval averages 760 cps and includes a 0.7m sub-interval of stronger radioactivity (>1,000 cps) from 234.3m to 235.0m that averages 1,500 cps.

The zone of elevated radioactivity is approximately 190m vertically below surface and 160m vertically below the top of the bedrock. All of the interval is hosted by basement rocks, at least 160m below the pre-erosional sub-Athabasca unconformity surface. The elevated radioactivity is associated with a broad zone of moderate to



strong clay, hematite and quartz alteration from 216m to 255m, all of which are commonly associated with uranium mineralization at unconformity-related uranium deposits in the Athabasca Basin. The alteration zone is spatially related to strong structural disruption in the drill core that includes several intervals of fault breccia and gouge.

As GEM-004 is the first drill hole ever completed in this target area, the zone of elevated radioactivity is wide open, both on section and in plan view. The closest drill hole (GEM-003) is located 2.9km to the southwest. Table 1 summarizes the drilling completed to date.

Table 1 – Drill Hole Summary

Hole-ID	Collar Co	oordinates		Dip	Azi	EOH	Interse	ection		
	East	North	RL			(m)	From (m)	To (m)	Length (m)	Radioactivity (CPS - RS125)
GEM-001	515439	6367063	457	-70	305	162	No inte	rsections	6	_
GEM-002	521685	6370212	470	-55	305	249	No inte	rsections	3	
GEM-003	523669	6371524	479	-55	305	225	No inte	rsections	3	
GEM-004	521685	6370212	459	-55	305	327	229.9	235.2	5.3	760
incl.							234.3	235.0	0.7	1500

## Claim Staking

Following the results in drill hole GEM-004, a total of 122km<sup>2</sup> of additional land has been staked by the Company across seven claims. The new claims cover areas that are contiguous with the original Gemini Project area, are near the basin margin and are prospective for uranium mineralization. The new claim locations are shown on Figure 3.

#### **Next Steps**

Due to the intersection in drill hole GEM-004, the summer drilling program has been paused to allow collection and interpretation of all drilling data, including geochemical analyses, to verify that the source of the elevated radioactivity is uranium and to determine its concentration in the core. Geochemical assay results are expected within approximately four weeks. Additionally, the Company will use this time to bolster radiometric safety protocols in anticipation of follow-up drilling designed to further test this zone of elevated radioactivity. As drill hole GEM-004 is only the fourth drill hole of a larger planned campaign, several other target areas remain to be evaluated.



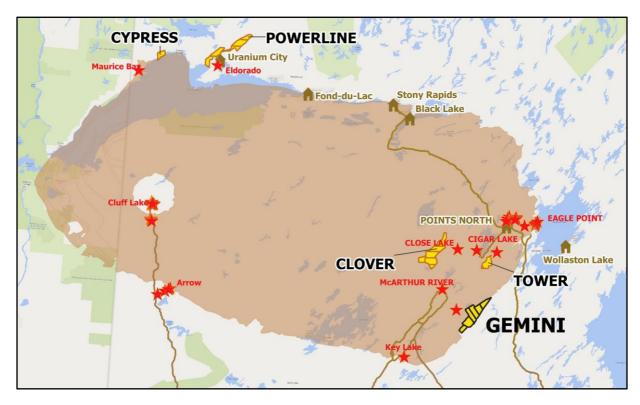


Figure 1 Athabasca Basin: 92 Energy's Projects (in yellow).

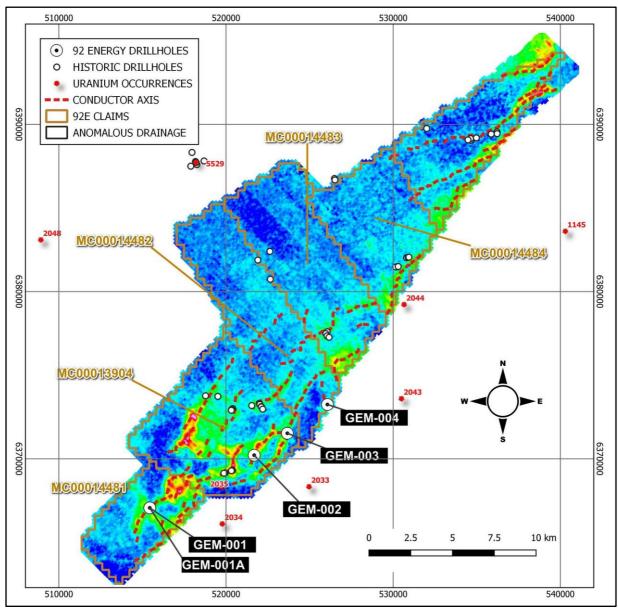


Figure 2 Gemini VTEM channel 30 conductivity image showing linear conductors and targets 2021 drill holes. SDMI occurrence 2035 is anomalous uranium in "muskeg" (or bog) sediment.

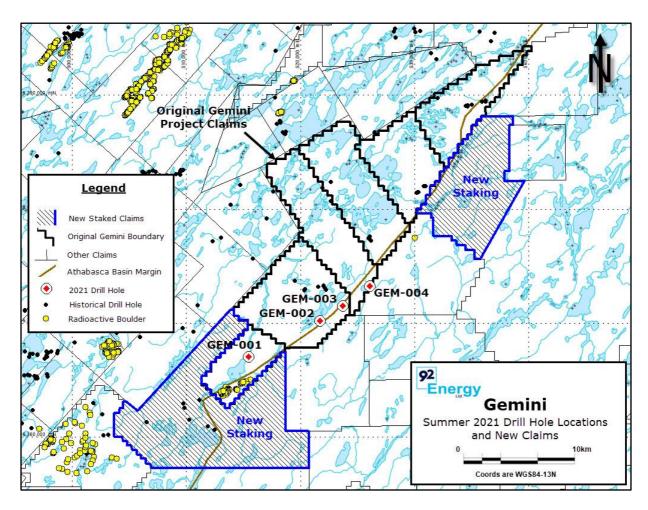


Figure 3 Gemini Project Area including newly staked claims

## **Gemini Project**

The Gemini Project is an early-stage unconformity-related uranium exploration project located on the eastern margin of the Athabasca Basin, Saskatchewan, Canada. It is 27km southeast of the McArthur River uranium mine, 60km northeast of the Key Lake uranium mill and 780km northeast of the regional centre of Saskatoon. The Project consists of 13 granted mineral claims with a total area of approximately 387km². It covers a 49km section of the sub-Athabasca unconformity which sub-crops beneath glacial sediments in the eastern and north-eastern parts of the project area but reaches depths of up to 174m in the western part. For those areas where the unconformity is shallow or absent, there is potential for near-surface basement-hosted uranium mineralization amenable to open pit mining.

This announcement is authorised for release by the Board of 92 Energy Limited.

-ENDS-



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#### **ABOUT 92E**

92 Energy is an Australian, ASX listed, uranium exploration company exploring for high-grade unconformity style uranium in the Athabasca Basin, Saskatchewan, Canada.

The Company owns 100% interest in its 28 mineral claims in the Athabasca Basin, Canada. These 28 claims make up the Company's five projects Gemini, Tower, Clover, Powerline Creek and Cypress River.

## **Competent Person's Statement**

The information in this document as it relates to exploration results was provided by Steve Blower, a Competent Person who is a Professional Geoscientist in good standing with the Engineers and Geoscientists BC. Mr. Blower is Interim Vice President, Exploration for 92 Energy Ltd has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Blower consents to the inclusion in this document of the matters based on the information in the form and context in which it appears. Mr. Blower holds shares in the Company.

## **Forward Looking Statements**

Some statements in this announcement regarding estimates or future events are forward-looking statements. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Statements regarding plans with respect to the Company's mineral properties may also contain forward looking statements.

Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results expressed or implied by such forward-looking statements. These



risks and uncertainties include but are not limited to liabilities inherent in exploration and development activities, geological, mining, processing and technical problems, the inability to obtain exploration and mine licenses, permits and other regulatory approvals required in connection with operations, competition for among other things, capital, undeveloped lands and skilled personnel; incorrect assessments of prospectivity and the value of acquisitions; the inability to identify further mineralisation at the Company's tenements, changes in commodity prices and exchange rates; currency and interest rate fluctuations; various events which could disrupt exploration and development activities, operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions; the demand for and availability of transportation services; the ability to secure adequate financing and management's ability to anticipate and manage the foregoing factors and risks and various other risks. There can be no assurance that forward-looking statements will prove to be correct.



**SECTION 1: Sampling Techniques and Data** 

Criterion	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, 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.	Radioactivity was measured with a hand-held RS-125 spectrometer made by Radiation Solutions Inc. on NQ sized drill core. Measurements were collected in 10cm intervals.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Measurements of radioactivity were carried out systematically in 10cm intervals.
	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.	Radioactivity was measured on each 10cm piece of drill core in an area away from the rest of the drill core to mitigate the chance of cross contamination.
Drilling Techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Drilling was completed with a heli-portable core rig, collecting NQ sized drill core.
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The amount of core recovered between each 3m marker block was measured and recorded.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The drill crew was instructed to maximize core recovery through altered and broken intervals. Drilling additives were used when necessary to aid with core recovery.
	<ul> <li>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.</li> </ul>	No known relationship exists between sample recovery and grade at the Gemini Project.
Logging	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.	Although the Project is at a very early stage of exploration, drill core has been geologically and geotechnically logged to a level of detail sufficient to support mining studies and mineral resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging is qualitative in nature and systematic core photos have been collected.



Criterion	JORC Code Explanation	Commentary
	The total length and percentage of the relevant intersections logged.	A total of 963m has been drilled in the current program. One drill hole has intersected 5.3m of elevated radioactivity.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or</li> </ul>	Radioactivity is measured on whole core before it is split for geochemical analysis.  Not relevant.
	<ul> <li>for all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	Radioactivity is measured on whole NQ-sized core before it is split for geochemical analysis.
	<ul> <li>Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.</li> </ul>	No quality control procedures were adopted for the measurement of radioactivity.
	<ul> <li>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.</li> </ul>	Radioactivity is measured on whole NQ-sized core before it is split for geochemical analysis.
	<ul> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Radioactivity is measured on whole NQ-sized core before it is split for geochemical analysis.
Quality of assay data and laboratory	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Not relevant.
tests	<ul> <li>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.</li> </ul>	Measurements of total gamma radioactivity in counts per second (CPS) were made with an RS-125 gamma spectrometer made by Radation Solutions, Inc. of Mississauga, Ontario, Canada. The instrument was calibrated at the factory.
	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.	No quality control procedures were adopted for the measurement of total gamma radioactivity.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	Significant intersections of elevated radioactivity were not verified.
	The use of twinned holes.	No holes were twinned.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	Measurements of total gamma radioactivity were keyed into an MX Deposit database.
	Discuss any adjustment to assay data.	No data was adjusted.



Criterion	JORC Code Explanation	Commentary
Location of data points	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.	The location of drill hole collars has been recorded using handheld GPS. Down hole surveys were completed every 50m with a Reflex Easy-shot magnetic survey tool.
	Specification of the grid system used.	The grid system is UTM (NAD83 Zone 13).
	Quality and adequacy of topographic control.	The Project exhibits subdued relief with undulating hills and topographic representation is sufficiently controlled using an appropriate Digital Terrane Model (DTM).
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill hole spacing is variable due to the early- stage nature of the Project.
	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.	The project is very early stage and therefore the drill hole spacing is not sufficient for Mineral Resource or Ore Reserve estimation.
	Whether sample compositing has been applied.	10cm samples were composited into longer intervals using a threshold of 500cps and a maximum 1m of internal sub-500cps material.
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	At this early stage of exploration, mineralisation thickness', orientation and geometry are not known.
structure	<ul> <li>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.</li> </ul>	At this early stage of exploration, mineralisation thickness', orientation and geometry are not known.
Sample security	The measures taken to ensure sample security.	Measurements were collected on site from drill core delivered to the core shack daily by helicopter from the drill site.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been completed.



**Section 2: Reporting of Exploration Results** 

Criterion	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	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, wilderness or national park and environmental settings.	The drilling was completed on mineral claims MC13904, MC14481, and MC14482, all of which are 100% owned by 92Energy.
	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.	All claims are in good standing and all necessary permits for drilling and geophysical activities have been received.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Gemini has been previously explored by Pitchstone, Denison, Conwest and others. Numerous drill holes have been completed. None of these drillholes are considered to have tested the target that is the subject of this announcement.
Geology	Deposit type, geological setting and style of mineralisation.	The target is a basement-hosted unconformity- related uranium deposit hosted in Proterozoic metasediments, similar to that at Arrow.
Drill hole Information	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:  • 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  • hole length.	This information is included as Table 1 in the announcement.
	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.	No material information has been excluded.
Data aggregation methods	<ul> <li>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.</li> </ul>	No weighting has been applied.
	<ul> <li>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.</li> </ul>	10cm samples were composited into longer intervals using a threshold of 500cps and a maximum 1m of internal sub-500cps material.



Criterion	JORC Code Explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are reported.
Relationship between mineralisation widths and intercept lengths	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. 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').	All intervals are down-hole lengths. The true width of the intervals is not known at this time.
Diagrams	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.	Refer to Figures in the announcement.
Balanced reporting	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.	All relevant exploration data is reported.
Other substantive exploration data	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.	All relevant exploration data is reported
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	