

Drilling in the Bakken - the heart of the revolution

We initiate coverage on Samson Oil & Gas (SSN) with a **SPECULATIVE BUY** rating and a price target of **\$0.05ps**. SSN is an emerging oil & gas company focussed in the Bakken shale in North Dakota USA, targeting unconventional shale oil resources with conventional exploration upside. SSN has high retained interests in its key North Stockyard and Rainbow projects located in the heart of the prolific Bakken shale, is partnered with key Bakken producers (Slawson Exploration Company, Inc. & Continental Resources) and is looking to undertake a multi well programme in 2014 targeting significant production and cash flow growth.

- **Production growth on-shore USA Bakken shale oil:** SSN is poised to generate significant production and cash flow growth as it looks to embark on an 18 well low risk development infill drilling programme in 2014/15 in its Bakken shale acreage interests. SSN is currently producing at 200boepd and is poised to grow to up to 1200 boepd in 2014 from this drilling programme.
- **2P Reserves of 3.6mmboe with 80% liquids:** SSN has built up a significant 2P reserves position over the last 2 years from infill development drilling with further significant growth expected from the 2014 drilling programme with the potential to grow to its PDP reserve from 0.9 mmboe to 2.253 mmboe.
- **Exploration upside Hawk Springs/Partnered with CNOOC:** SSN has a current interest of 66.6% (expected to go to 40% after the next farmout) in its key Hawk Springs acreage covering 21,000 net acres in Wyoming with conventional recoverable resource potential of over 30 mmbo (valued at around \$360m net to SSN) SSN is partnered with CNOOC on its first well and is looking to farm down some of its equity to drill an exploration well in 2014 to unlock this resource potential.
- **Industry Activity:** The Bakken Shale is the epicentre of the US oil shale boom and is now generating nearly 900k bopd. Key players nearby include Continental Resources, Statoil and Hess. SSN projects are located near the city of Williston which has significant infrastructure including drill rigs, frac crews etc.
- **Management:** SSN is led by an experienced board and management team who have broad experience in developing and building upstream an oil and gas company, in particular in US unconventional plays.
- **Recommendation/Valuation:** We initiate coverage on SSN with a SPECULATIVE BUY rating and a risked valuation of \$0.05ps.
- **Key Catalysts:** North Stockyard/Rainbow drilling 2014; Hawk Springs farm out/drilling Q1/Q2 2014; Roosevelt exploration 2014.
- **Key Risks:** Funding risk, Commercialisation, Exploration risk, Commodity price risk.

Year End Jun 30	2012A	2013A	2014F	2015F	2016F
Reported NPAT (A\$m)	(31.1)	(11.8)	(0.6)	27.8	40.2
Recurrent NPAT (A\$m)	(31.1)	(11.8)	(0.6)	25.8	36.2
Recurrent EPS (cents)	(1.8)	(0.6)	(0.0)	1.0	1.4
EPS Growth (%)	na	na	na	na	na
PER (x)	(1.6)	(4.5)	(128.8)	2.8	2.0
EBITDA (A\$m)	(35.7)	(13.8)	(0.0)	27.3	44.5
EV/EBITDA (x)	(1.4)	(3.8)	(3,016.9)	3.1	1.9
Capex (A\$m)	40.0	11.3	13.3	28.9	28.8
Free Cashflow	(32.1)	(6.2)	(13.4)	0.4	13.1
FCFPS (cents)	(1.8)	(0.3)	(0.5)	0.0	0.5
PFCF (x)	(1.5)	(8.5)	(5.3)	182.1	5.4
DPS (cents)	0.0	0.0	0.0	0.0	0.0
Yield (%)	0.0	0.0	0.0	0.0	0.0
Franking (%)	0.0	0.0	0.0	0.0	0.0

24 January 2014

12mth Rating	SPECULATIVE BUY	
Price	A\$	0.02
Target Price	A\$	0.05
12m Total Return	%	98

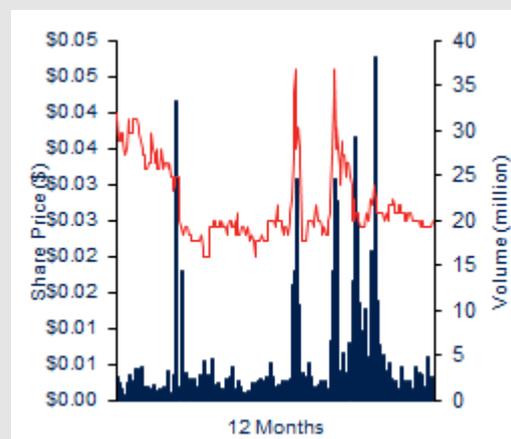
RIC: SSNAX	BBG: SSN AU	
Shares o/s	m	2547.6
Free Float	%	100.0
Market Cap.	A\$m	71.3
Net Debt (Cash)	A\$m	2.0
Net Debt/Equity	%	472
3m Av. D. T'over	A\$m	0.03
52wk High/Low	A\$	0.05/0.02
2yr adj. beta		2.31

Valuation:		
Methodology		NPV
Value per share	A\$	0.05

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Disclosure: Patersons Securities acted as Corporate Adviser and Lead Manager to a Shortfall Share Placement that raised \$7.96 million at \$0.025 per share in August 2013. It was paid a fee for this service.

12 Month Share Price Performance



Performance %	1mth	3mth	12mth
Absolute	22.0	7.6	-20.0
Rel. S&P/ASX 300	20.4	11.1	-23.4

Key Points

We initiate coverage on emerging oil and gas company Samson Oil & Gas Ltd (SSN) with a price target of \$0.05ps, a significant total return based on the current share price. SSN is an emerging oil & gas company focussed in the Bakken shale in North Dakota USA, targeting unconventional shale oil resources with conventional exploration upside. SSN has high retained interests in its key projects located in the heart of the prolific Bakken shale, is partnered with key Bakken producers (Slawson Exploration & Continental Resources) and is poised to undertake a multi well programme in 2014 targeting significant production, reserves and cash flow growth. The main thesis of our rating is as follows:

Production growth on-shore USA Bakken shale oil targeting 1200 boepd 2014

SSN is poised to generate significant production and cash flow growth as it looks to embark on an 18 well low risk development drilling programme in 2014 in its Bakken shale acreage interests in 2014. SSN is currently producing at 200 BOEPD and is looking to grow to 1200 boepd in 2014. Both the the North Stockyard and Rainbow projects offer 30 infill drilling locations with development achieved via cost effective pad drilling and completions.

2P Reserves of 3.6mmboe/80% oil -targeting growth of 1.3mmboe by 2015

SSN has built up a significant 2P reserves position over the last 2 years from infill development drilling with further significant growth expected from the 2014 infill drilling programme of up to 30 wells with the potential to grow an additional 1.3mmboe reserves at the North Stockyard and Rainbow fields. Both the fields can be developed consecutively with reserve growth from both fields.

Exploration upside Hawk Springs/Roosevelt

SSN has a current interest of 66.6% (expected to go to 40% after the next farmout) in its key Hawk Springs acreage covering 21,000 net acres in Wyoming with conventional recoverable resource potential of over 30 mmbo. SSN is partnered with CNOOC on its first well and is looking to farm down some of its equity to drill an exploration well in 2014 to unlock this resource potential. SSN is also partnered with Canadian E&P Momentum Energy on the Roosevelt prospect where it is free carried on an exploration well.

Industry Activity

The Bakken Shale is the epicentre of the US oil shale boom and is now generating nearly 1 mmbopd. Key players nearby include Continental Resources, Statoil, Hess, etc. SSN projects are located near the city of Williston which has significant infrastructure including drill rigs, frac crews etc.

Management – proven track record

SSN is led by an experienced Board and management team who have broad experience in developing and building an upstream oil and gas company, in particular, in unconventional plays.

Figure 1: Reserves (mmboe)*

	1P Reserves	2P Reserves
North Stockyard	0.68	2.23
Rainbow	0.70	1.23
Other	0.21	0.21
TOTAL	1.59	3.67

*Net SSN. Source: SSN

Figure 2: SWOT Analysis

Strengths

- ✓ Focused holding in key Bakken shale oil play
- ✓ 3.6mmboe 2P reserves
- ✓ Strong in-house technical/management expertise/exploration experience
- ✓ Focussed company all SSN assets in on-shore USA in North Dakota/Wyoming with legacy assets in Texas.
- ✓ Good access to infrastructure/drill rigs etc
- ✓ Material interest in play 52/30% of acreage
- ✓ Existing production assets used to fund G & A of the business
- ✓ No debt, and ~\$10.5m cash at 30/9/13.

Weaknesses

- × Exploration/Geological risks on Hawk Springs/Roosevelt project. Operating in unexplored acreage and unproven play is higher risk drilling potentially offset by expertise provided by a major E&P partner farming into the project.
- × Lack of capital to fund extensive drilling programme will require debt funding to progress.
- × Significant number of shares on issue 2.5bn

Opportunities

- ✓ Underexplored acreage in Hawk Springs/Roosevelt/South Prairie with conventional & unconventional potential
- ✓ Industry activity by Hess, Continental etc in adjacent areas in particular in the Three Forks shale elevates the prospectivity of SSN's acreage
- ✓ High leverage to success due to low market valuation and extensive acreage position – farm out could achieve a re-rating of SSN

Threats

- × Unconventional drilling is subject to variable well production rates and estimated ultimate recovery (EUR), reservoir performance and significant decline rates
- × Access to capital, debt and equity – SSN requires funding to undertake a 18 well 2014/15 development drilling campaign
- × Commodity prices: Oil and Gas prices
- × Environmental impact – cold weather conditions impacting drilling, access

Catalysts and Risks

It is important to note that an investment in SSN is high risk and speculative. The key catalysts and risks to an investment in SSN are as follows:

Catalysts/Positives

- **Development catalysts:** Following are the key areas of focus for SSN:

Project	Details	Timing
North Stockyard	Drilling & fracking – 14 wells	2014/2015
Rainbow	Drilling & fracking – 3 wells	Q1 & Q2 2015
Hawksprings	Farm out & Drilling of Bluff well	Q1 2014
South Prairie	Drilling of Pubco well	Q2 2014
Roosevelt	Roosevelt exploration	2014

- **Resource/Reserve bookings:** Drilling of its proved and probable reserve base in 2014 should enable the booking an additional 1.3 mmboe of PDP reserves.
- **High retained interest:** SSN has high retained interests in its acreage of between 25 and 66% across the acreage in several projects which provides for alternative non-dilutive funding options. The farm down and appointment of an experienced industry partner with significant oil shale experience will be a key catalyst to SSN in exploration/appraisal of their significant acreage position.
- **Industry activity:** Industry activity in the on shore unconventional shale oil sector has increased in US in the last 3 years following the shale gas revolution. Utilising the same horizontal drilling and hydraulic fracturing techniques as used in shale gas, tight/shale oil production in the US has increased significantly over the last 3 years. The Bakken play is the focus of the US shale oil revolution and is now generating close to 1 mmbopd of production.
- **Management expertise:** SSN management have been involved in the development of emerging E&P companies including emerging Australian unconventional E&P companies.
- **Access to drilling equipment and nearby infrastructure:** The Williston basin is in the heart of the Bakken play and is well located close to nearby infrastructure with ready access to drilling equipment, rig teams, salt water disposal and pipeline infrastructure.

Risks/Negatives

- **Small amount of production:** Whilst SSN has a small amount of production it only covers a portion of G&A costs. Accordingly, it is important for SSN to develop its North Stockyard and Rainbow projects in a timely manner to generate meaningful production and cash flow. Samson's needs to undertake a significant drilling campaign on its conventional & unconventional acreage to generate meaningful oil & gas production increases.
- **Exploration/Geological risks:** SSN is sensitive to exploration and geological risks on its conventional Hawk Springs and South Prairie projects. After mechanical failure of the first well drilled on the Hawk Springs acreage and the Gretel II well on the Roosevelt project in 2012 the market will be keenly watching for exploration success on these projects. Importantly SSN is looking to farm down to enable some equity carry and share the risk on this exploration. To reduce the risk on the project SSN is looking to use the extensive 3D seismic survey and lessons learned from previous drilling undertaken. Importantly if SSN is successful on Hawk Springs there is significant upside potential as they have identified up to 20 different prospects containing over 30 mmbp of recoverable resource potential. The risk profile for shale appraisal on North Stockyard and Rainbow is different with a very high chance that they will encounter hydrocarbons in the targeted formation. However the key risk is in determining the optimal completion techniques and in achieving an economic flow rate that would facilitate commercial development – as the Bakken is a known producer this risk is low. This process can take some time and involve significant sums of capital. Capital and expertise provided by a Farm-out partner would be a key mitigant in this process.
- **Development risks:** As with any resource development project there is the risk that the development does not proceed according to plan. Timing, capital costs, technical and reserve risks and access to infrastructure can negatively impact earnings and valuation.
- **Funding risks:** SSN is partly funded for the proposed 2014/15 - 18 well Bakken drilling programme however will require funding from debt or equity for the future horizontal drilling programme in 2014 estimated to cost \$26m (net SSN) on the North Stockyard and Rainbow fields. On the HawkSprings field SSN is looking to farm down its interest to provide some equity carry on the Bluff well. Once full field production is established by SSN in North Stockyard/Rainbow from the current small production level the field will become largely self funding.
- **Other standard oil industry risks:** Commodity prices and exchange rate risks. SSN has no oil price or exchange rate hedging in place. This is particularly relevant for shale plays which require an oil price of above \$70/bbl to ensure it is economic.

Valuation \$0.05ps

We are initiating coverage on Samson Oil & Gas with a Speculative BUY rating and a risked valuation/price target for SSN of \$0.05ps which represents significant upside to the current share price. We believe SSN has an attractive portfolio of assets centred in the USA's most prolific shale oil basin. Our base case valuation is summarised below:

Figure 3: Base Case Valuation		
Valuation	A\$m	A\$/sh
North Stockyard	58	0.02
Rainbow	52	0.02
Exploration	50	0.02
Corporate	(43)	(0.02)
Cash	10	0.00
Debt	(12)	(0.00)
Total @ 10% Discount Rate	115	0.05
Price Target		0.05

Source: Patersons Estimates

Valuation Methodology:

North Stockyard & Rainbow: Our valuation for the North Stockyard & Rainbow projects is based on a DCF of the full field development of its interests on 120-acre spacing using a number of conservative assumptions:

- We have assumed an EUR of 440 mboe per well. We have assumed well costs of US\$8m, and operating costs of US\$20/boe.
- In addition to individual well profiles, the rate of drilling has a large impact on the overall production profile and NPV. Our model assumes 18 wells are drilled & in production in 2014, then 12 wells in 2015. Drilling intensity is the key to maintaining production in the Bakken shale with rapid decline rates.
- We assume a long term liquids price of US\$90/Bbl and a gas price of US\$4/MMbtu.

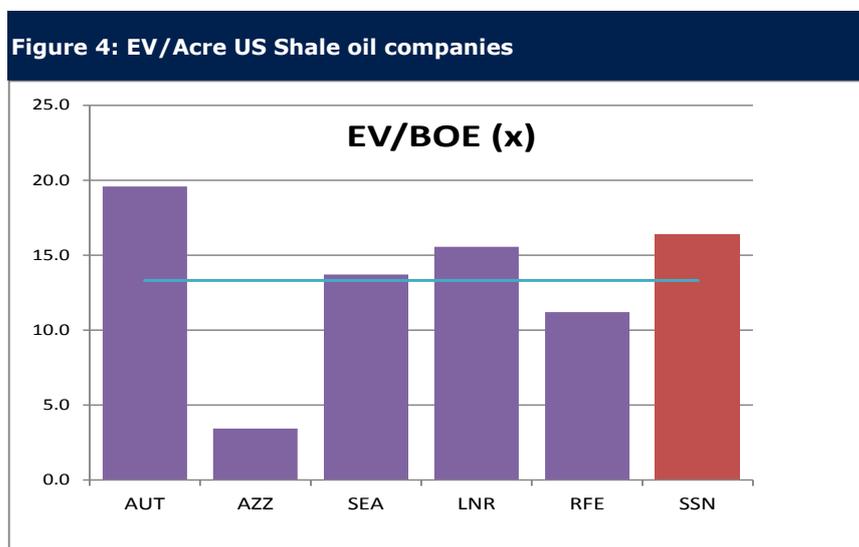
Contingent & Prospective Resources: To value contingent and prospective resources attributable to the Hawk Springs and South Prarie projects we have used an "Expected Monetary Value" (EMV) approach, which is an industry standard methodology. This methodology involves calculating a theoretical success value, weighting it by the assessed probability of success and subtracting well costs. All wells should have a positive EMV or they should not be drilled. We have risked these valuations to take into account the inherent uncertainties such as production timing and capex delays and over runs. We have valued the Roosevelt project at \$10m to reflect the recent farm out transaction.

Other: The NPV of corporate overhead, cash and net debt are added to the valuation.

Our valuation is based on fully diluted shares based on 2,547m shares on issue. We have assumed a debt raising of \$12m to fund part of SSN's share of the development programme.

Comparable Valuations

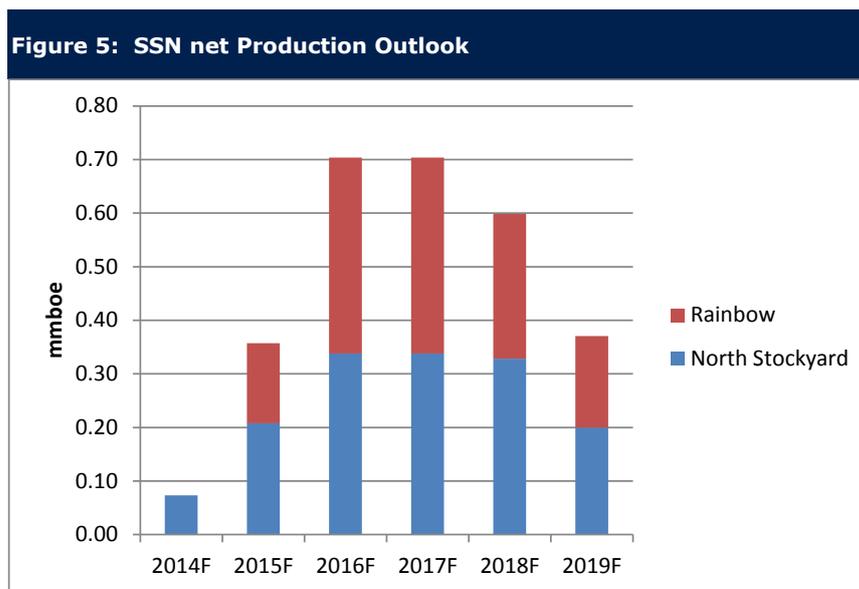
In figure 4 below we highlight the valuation of SSN vs. its market peers and highlight the fact that SSN trades slightly above the average for its US shale oil peers based on an EV/2P multiple. SSN trades on an EV/2P multiple of A\$16/boe which compares to an average of A\$13/boe for comparable US shale companies. However based on the expected reserve growth of 1.3mmbbl in 2014, SSN trades on a multiple closer to A\$12/boe.



Source: IRESS, Company reports

Production Outlook

Our base case production profile assumes the production from the North Stockyard and Rainbow field under a potential 30 well development programme over 2-4 years. We have modeled the 30 well programme assuming an expected EUR of gross 440mboe per well and assumed the typical Bakken type curve for production. This scenario forms the basis of our earnings outlook for SSN with production peaking at 1200bopd. The main risks to production are development related and include funding of the well programme.



Source: Patersons Estimates

Company Overview

Samson Oil & Gas Limited (SSN) is an emerging oil & gas company focused on projects in North Dakota/Wyoming regions on-shore USA. SSN is listed on the Australian Securities Exchange (ASX) and the NYSE AMEX (unique in its ASX peer group as it is listed on a US main board exchange), ticker code SSN with interests in 9 projects of which 5 are the key areas of focus. Key points are as follows:

- SSN is focused on shale oil unconventional development in the Bakken formations in the North Dakota and conventional exploration projects in Wyoming.
- The main focus of SSN is the Bakken shale oil assets where an 18 well development program is planned on the North Stockyard/Rainbow projects in 2014/15 targeting significant production and reserves growth.
- There is exploration upside in the:
 - conventional Hawk Springs project where SSN is partnered in drilling its first well with CNOOC in early 2014 targeting significant resource potential.
 - the unconventional Roosevelt project where SSN is partnered with Momentus Energy and 3D seismic is planned in 2014
- A small amount of production is generated from a number of small legacy assets.

Figure 6: SSN Asset Overview



Source: SSN Company reports

Key Assets

The main focus of SSN is the 18 well development/appraisal well program planned on North Stockyard/Rainbow in 2014. Exploration upside is provided in the Hawk Springs, Roosevelt and South Prairie projects. Key details on the assets are as follows:

Figure 7: SSN Company Assets

Project	Location	SSN Interest	Details	Description	Acres (net)	Operator	Status
North Stockyard	North Dakota	30%	Production/Appraisal	Shale oil/Bakken	503	Slawson	Focus
Rainbow	North Dakota	52%	Appraisal	Shale oil/Bakken	950	SSN	Focus
Hawk Springs	Wyoming	66.6%	Exploration	Conventional Oil	21,000	SSN	Focus
South Prairie	North Dakota	25%	Exploration	Shale oil/Bakken	6,415	Stephens Energy	Focus
Roosevelt	North Dakota	33.3%	Exploration	Shale Oil/Bakken	15,000	SSN	Focus
Greens Canyon	Wyoming	100%	Exploration	Tight Gas	3,186.5	SSN	Legacy
Flaming George	Wyoming	25%	Exploration	Tight Gas	6,400	SSN	Legacy
State GC Oil Field	New Mexico	27%	Production	Conventional Gas	130	Legacy Reserves	Legacy
Sabretooth Gas Field	Texas	10%	Production	Conventional Gas	40	Davis Southern	Legacy
Total					68,624		

Source: Source: SSN Company Reports. Focus area highlighted.

North Stockyard -Williston Basin –North Dakota USA

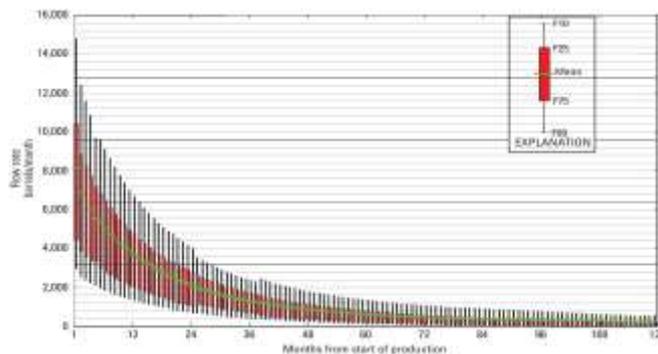
JV Participants	JV Partners: SSN 25%/Slawson Energy 25%/Continental 40%
Key Details	The North Stockyard project is SSN's key area of focus and is located in the heart of the Williston Basin in Williams County, productive in the Bakken and Three Forks formations and surrounded by major players. The Bakken is the centre of the Shale oil revolution currently transforming onshore US oil production with tight oil production now at a record

91,000mbopd. SSN has eight producing wells on the acreage (on pump) producing approximately 118 bopd net to Samson and is now looking to significantly grow production via a multi well horizontal fracture stimulated well programme. To date the focus has been on production from the middle member of the Bakken Formation and will extend into the first benche of the Three Forks Formation which is immediately below the Bakken Formation. SSN has an average 30% working interest/23% net revenue interest in 7 producing wells and holds a net 503 acres in the North Stockyard project. The acreage is held in JV with Slawson and Continental and is surrounded by significant Bakken producers Continental Resources, Kodiak, Hess and Statoil. SSN holds 2.23 MMBOE of 2P reserves with a 85%% oil content. Current net production is 130 boepd and SSN is targeting an increase to 1200 boepd in 2014 by infill drilling. Operator of the project is Slawson Energy a private US operator in the Bakken.

- **Environmental Restrictions:** SSN acreage is held on Fee land with no restriction and production operations which can go year round).
- **Lease Terms:** 100% of acreage is held by production allowing SSN to hold the property beyond the initial lease term and avoid renegotiating leases upon expiry of the initial term.
- **Infrastructure:** The basin is well served by infrastructure with ready access to drill rigs and service companies. SSN own gas gathering, storage and pipeline infrastructure and, importantly, the JV own its own salt water disposal facilities.
- **Geology:** To date the development of the Bakken shale has been focused on the Middle Bakken Formation. This has proven to be a prolific producer and the play is now moving to the Three Forks formation where promising early well results have been recorded. Please refer to the section on the Bakken shale for further details on the geology of the Bakken shale play.
- **Development Plan:** SSN has an extensive field development plan consisting of the following:
 - 18 Bakken and Three Forks (Upper bench infill wells) consisting of:
 - 6 Middle Bakken infill wells (all drilled and completed 5 fraced); 4 Middle Bakken corner wells(two currently being drilled) and 8 Three Forks development wells
 - Wells will be drilled using pad drilling to reduce drilling and completion costs
 - At the end of this development phase well spacing will be 160 acres in both the middle Bakken and TF1 with the potential to add a further 16 wells at 160 acres in the TF1 and TF3 5,500ft horizontal wells on 160acre spacing with IP rates of up to 3,000 boepd targeted per well. (First infill IP at 1,500 boepd).
 - Bakken well technology continues to improve resulting in improved recovery rates and 20 plus stages per well.
 - SSN is targeting production growth to 1200boepd by June 2014 with an average 820 boepd in 2014 from the infill drilling programme.

Bakken Type curve: The Bakken play is the most established Shale oil play in the US and hence there is a significant amount of data on typical well recovery rates and the production profile. Over a 10 year life wells typically have a significant IP rate ranging from 5,000-10,000bbls initial production in the first 30 days and then exhibit a rapid decline in production by 50% in the first and second year, 30% in year 3 then 2-5% for the next 7 years. This is based on an analysis of extensive well data by the US Geological Society and is outlined in the chart below. Estimated Ultimate recoveries (EUR) from five Bakken formation assessment units demonstrate mean EUR ranging from 148 to 353mbls for the Bakken and 256mbls from the Three Forks formations. Samson employs Ryder Scott International (RSI) to calculate their reserves. RSI is used by a number of Bakken producers and accordingly has an extensive data base of decline curves across the Williston Basin. They are considered by many in the financial industry to be conservative in their projections.

Ten-year probabilistic-type curve for all horizontal wells in the Bakken and Three Forks Formation:



Source: USGS Procedure for Calculating EURs of Bakken and Three Forks Formations Horizontal Wells in the Williston Basin.

- Key details on recent Bakken wells drilled by SSN are as follows:

Well	Status
Sail & Anchor	Drilled & fraced IP 1500BOPD

	<table border="1"> <tr> <td>Tooheys, Coopers and Little Creatures</td> <td>Drilled, cased frac completed awaiting flow back.</td> </tr> <tr> <td>Blackdog</td> <td>Awaiting Frac</td> </tr> <tr> <td>Billabong</td> <td>Awaiting workover</td> </tr> <tr> <td>Rennerfeldt 1 & 2</td> <td>Spuded mid Jan being batched drilled</td> </tr> <tr> <td>Matilda Bay 1 & 2</td> <td>Expected to spud mid March</td> </tr> </table> <p>Historical wells drilled on SSN acreage and nearby have been recorded cumulative production up to 261,000 bo and have well established type curves given the production history of the Bakken. More wells are now being drilled into the Three Forks formation and type curves are similar to the Bakken. All wells are horizontal fracture stimulated wells. The central core of the Bakken has moved from drilling wells to hold leases to a concentration on infill drilling. Offset competitor wells infill drilling has resulted in 30,000-70,000 Bbl for the first 90 days from 39 wells. This data has been sourced from publicly available well data.</p> <p>Details on producing wells drilled on SSN acreage and nearby are outlined below:</p> <table border="1"> <thead> <tr> <th>Well</th> <th>Operator</th> <th>Formation</th> <th>Production</th> <th>SSN Interest</th> </tr> </thead> <tbody> <tr> <td>Saccaro 310 1-H</td> <td>Kodiak</td> <td>Bakken</td> <td>261,514bbl</td> <td>0%</td> </tr> <tr> <td>Grasser 1-26H</td> <td>Zavanna</td> <td>Bakken</td> <td>201,639bbl</td> <td>0%</td> </tr> <tr> <td>Everett 1-15H</td> <td>Zavanna</td> <td>Bakken</td> <td>106,042bbl</td> <td>25%</td> </tr> <tr> <td>Gene 1-22H</td> <td>Zavanna</td> <td>Bakken</td> <td>156,681bbl</td> <td>25%</td> </tr> <tr> <td>Earl 1-13H</td> <td>Zavanna</td> <td>Bakken</td> <td>189,538bbl</td> <td>25%</td> </tr> <tr> <td>State 36-1</td> <td>Statoil</td> <td>Three Forks</td> <td>148,298bbl</td> <td>0%</td> </tr> <tr> <td>Gene 8-1H</td> <td>Hess</td> <td>Three Forks</td> <td>87,211bbl</td> <td>0%</td> </tr> <tr> <td>Alice 27-4H3</td> <td>Kodiak</td> <td>Three Forks</td> <td>109,966bbl</td> <td>0%</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Well costs: Horizontal well costs are estimated to be \$8.1m (net \$2.1m SSN) (fraced and stimulated). • Economics: Given IP's of 750+ bopd and Gross EUR of 440mboe, well economics are attractive with an estimated net NPV of \$2.6m per well with a total \$55m NPV net SSN from a 12well programme. Wells are economic at oil prices of \$40-50bbl. • Fiscal Terms: Royalties on oil and gas production of 25% • Resource/Reserve potential: 2P reserves of 2.23.0 mmboe split 1.870 mmb oil and 2.146 bcf gas associated with the North Stockyard project with an NPV 10 of US\$45.1m. The reserves increased from 0.9mboe from 2012 as a result of increased drilling density in the North Stockyard project. These reserves are attributable to the Middle Bakken and TF1 zones with significant additional resource potential from the TF2 and TF3 zones zone which are only now beginning to be developed in the adjacent areas. No reserves have been attributed to these two zones in Samson's reserve estimate, (completed by Ryder Scott). <p>The North Stockyard project is SSNs key area of focus with significant production and reserves growth expected from the middle Bakken and Three Forks formations which is now being de-risked. The 18 well infill development drilling programme over the next 12months should generate significant earnings and production growth for SSN.</p>	Tooheys, Coopers and Little Creatures	Drilled, cased frac completed awaiting flow back.	Blackdog	Awaiting Frac	Billabong	Awaiting workover	Rennerfeldt 1 & 2	Spuded mid Jan being batched drilled	Matilda Bay 1 & 2	Expected to spud mid March	Well	Operator	Formation	Production	SSN Interest	Saccaro 310 1-H	Kodiak	Bakken	261,514bbl	0%	Grasser 1-26H	Zavanna	Bakken	201,639bbl	0%	Everett 1-15H	Zavanna	Bakken	106,042bbl	25%	Gene 1-22H	Zavanna	Bakken	156,681bbl	25%	Earl 1-13H	Zavanna	Bakken	189,538bbl	25%	State 36-1	Statoil	Three Forks	148,298bbl	0%	Gene 8-1H	Hess	Three Forks	87,211bbl	0%	Alice 27-4H3	Kodiak	Three Forks	109,966bbl	0%
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Everett 1-15H	Zavanna	Bakken	106,042bbl	25%																																																				
Gene 1-22H	Zavanna	Bakken	156,681bbl	25%																																																				
Earl 1-13H	Zavanna	Bakken	189,538bbl	25%																																																				
State 36-1	Statoil	Three Forks	148,298bbl	0%																																																				
Gene 8-1H	Hess	Three Forks	87,211bbl	0%																																																				
Alice 27-4H3	Kodiak	Three Forks	109,966bbl	0%																																																				

Rainbow Project –Williston Basin- North Dakota USA

JV Participants	JV Partners: SSN 52% and operator of Sections 18/19; SSN 23% with Continental as Operator in Section 17 and 20
Key Details	<p>SSN holds a 52%/23% working interest in two 1,280 acre drill spaced units respectively in the Rainbow project (a net of 950 acres) and no acreage is held by production. The project is located in the heart of the Williston Basin in close proximity to the North Stockyard project and surrounded by the major players including Hess and Continental Oil and Gas. Working interest partners are Continental, is the operator of one the two SSN's drilling units. The acreage is productive in both the Bakken and Three Forks formations. Activity is stepping up nearby the project with 19 wells permitted in total by Hess, Kodiak, Crescent Point and Continental scheduled for drilling in 2014.</p> <ul style="list-style-type: none"> • Development Plan: The Rainbow project is expected to have 16 wells - 8 in the Middle Bakken and 8 in the first bench of the Three Forks (TF1) – 10,000ft horizontal wells on standard 1280 acre spacing. <ul style="list-style-type: none"> ○ Wells will be drilled using pad drilling to reduce drilling and completion costs and will be drilled over the next 24mths. An initial well (operated by Continental) is expected to commence in Q2 2014. ○ Current well spacing is on 160acre spacing in the middle Bakken and TF1 for 16 wells with the potential to drill a further 16 wells at 160 acres in TF2 and TF3. • Well costs: Horizontal well costs are estimated to be \$8.1m (net \$2m-\$4m SSN) (fraced and stimulated). • Economics: Given IP's of 750 bopd and Gross EUR of 440mboe, well economics are attractive with an estimated net NPV of \$2.6m per well with a total \$55m NPV net SSN from a 12-well programme. Wells are economic at oil prices of \$40-50bbl. • Fiscal Terms: Royalties on oil and gas production of 25%

<ul style="list-style-type: none"> • Resource/Reserve potential: 2P reserves of 1.232mboe split 1.02 mbo and 1.285 bcf gas associated with the Rainbow project with an NPV 10 of US\$14.3m. These reserves are attributable to the Middle Bakken and TF1 zones with significant additional resource potential from the Three Forks zones (TF 2 and 3) which is only now beginning to be developed <p>The Rainbow project represents SSN's second key area of focus with a 16 well development programme expect to generate significant production and cash flow. With activity stepping up from nearby operators Hess and Continental this could prove to be a significant asset for SSN.</p>
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Hawk Springs Project Wyoming USA

JV Participants	JV Partners: SSN 66 and Operator/CNOOC 33%									
Key Details	<p>This is a conventional oil play located in the Denver-Julesburg (DJ) Basin in Goshen County, Wyoming targeting Permian age conventional oil prospects with up to 20 prospects identified and over 30mmbbl potential. SSN net acreage is 21,000 acres. CNOOC signed on as a 33.3% partner in the Bluff well as part of a deal they had with the lease that Samson bought from Chesapeake. The area is considered exploration acreage with 3D seismic data covering the acreage identifying more than 20 conventional prospects with potential for 400 mbo EUR per well. SSN has drilled two wells on the acreage in 2011 and 2012 with the most recent well drilled on the acreage, the Spirit of America well, encountering problems due to a leakage of the reservoir due to faulting. This well provided details on the reservoir properties with oil shows and has enabled SSN to validate the 3D seismic data and high grade the next prospect for drilling – the Bluff #1-11 well. The near term focus is on drilling the Bluff prospect in Q1 2014 and SSN is currently in discussions to farm out a percentage of their interest in the prospect to enable some equity carry on the well.</p> <ul style="list-style-type: none"> • SSN has participated in two wells to date on the acreage with details below: <table border="1"> <thead> <tr> <th>Well</th> <th>Operator</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Defender -2011</td> <td></td> <td>• Niobrara Oil well on pump, 20 bbls/day during qtr.</td> </tr> <tr> <td>Spirit of America -2012</td> <td>SSN</td> <td> <ul style="list-style-type: none"> • Intersected two quality Permian age reservoirs – 9300ft sand oil saturated and 9,500ft sand is water saturated. • Reason for lack of oil accumulation is a leak point established by juxtaposition of another reservoir across a fault. • SSN believe this is unique in the project area and the other 2 dozen prospects are not impacted by faulting. </td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Geology: The reservoirs are developed as Aeolian sand dunes. The Permian is prolific in the adjacent Powder River Basin and known there as the Minnelusa Formation. The formation targeted is the Permo-Penn Hartville formation equivalent to the Minnelusa Formation in the Powder River Basin to the north and the Wolfcamp in the Midcontinent. The Hartville sand is targeted at 9000ft. • Development Plan: The focus is on drilling the Bluff prospect in Q1 2014. The Bluff prospect is a four way closed anticline with significant amplitude anomalies similar to those seen in SOA well. CNOOC is a partner in the first Bluff well. The prospect will be drilled vertically to approx. 8,550ft to test multiple targets in the Permian and Pennsylvanian sections. After the well has been drilled the plan is to complete evaluation and then drill development wells within the successful prospect to move to production. The JV will then proceed to drill other prospects in the project area. • Well costs: Wells are drilled vertically as a conventional reservoir and may not need to be fraced. Vertical well costs are estimated to be \$3m (net \$2.1m SSN per farm out with CNOOC covering 1/3) (Acid stimulation). • Economics: Given IP's of 300+ bopd and Gross EUR of 440mboe, well economics are attractive with an estimated net NPV of \$2.6m per well with a total \$55m NPV net SSN from a 12well programme. Wells are economic at oil prices of \$40-50bbl. • Fiscal Terms: Royalties on oil and gas production of 20% • Resource/Reserve potential: No resource potential has been formally assigned to this acreage at this stage however early stage internal estimates are for initial oil in place of 120mmbbls and recoverable oil of 30mmbbl.9with an estamted value net to SSN of \$360 million) <p>The Hawk Springs acreage represents significant exploration upside for SSN in the event of success. The acreage contains potentially up to 30mmbbl oil potential and near term success on the Bluff prospect will go some way to de-risking the geology on this acreage with a farm out for a partial carry and drilling in Q1 2014 representing a key catalyst.</p>	Well	Operator	Details	Defender -2011		• Niobrara Oil well on pump, 20 bbls/day during qtr.	Spirit of America -2012	SSN	<ul style="list-style-type: none"> • Intersected two quality Permian age reservoirs – 9300ft sand oil saturated and 9,500ft sand is water saturated. • Reason for lack of oil accumulation is a leak point established by juxtaposition of another reservoir across a fault. • SSN believe this is unique in the project area and the other 2 dozen prospects are not impacted by faulting.
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South Prarie Project USA

JV Participants	JV Partners: SSN 25%/ with Stephens Operator 28% interest
Key Details	SSN holds a 25% interest in 25,658 gross acres (net 6,415 acres) in the South Prarie project. The project is located in the Williston Basin in Renville and Ward counties and is prospective for the Mississippian Mission Canyon Formation. Many producing Mission Canyon field analogs exist along trend and the concept is to follow the Prairie Salt edge where shallow structural closures were created by Prairie salt dissolution. Over 2.5 mbo has been produced 2miles northeast of the field from similar geology at the South Glenburn

	<p>field.</p> <ul style="list-style-type: none"> One well has been drilled on the acreage and the well failed due to trap timing. The Matson well tested an interior salt dissolution pod which formed after hydrocarbon migration thus was never able to trap any oil. 3D seismic has identified a follow up well location. Key upside opportunities are for offset production to establish a trapping mechanism with 3D seismic the key to structural definition. Economics are attractive with well costs low at \$0.75m per well for 400 mbo EUR per well with the first well planned in Q2 of 2014. This well is the Pubco prospect. <p>This project represents SSN's other conventional exploration acreage potential and is expected to see the Pubco well drilled in 2014.</p>
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Roosevelt Project Montana USA

JV Participants	JV Partners: SSN 33%*/Operator/Momentum Energy 33%
Key Details	<p>SSN has an interest in approximately 45,000 gross acres (15,000 net acres) in the Roosevelt Project post the recent farm out with Momentum Energy who with Fort Peck Energy Co. (FPEC) will have 15,000 net acres each. SSN was looking to divest its interest in this project but has now entered a farm out of the acreage to Momentum Energy to undertake 3D seismic and an exploration well on the acreage. Key points:</p> <ul style="list-style-type: none"> First Bakken well, Australia II, in the Roosevelt project area was drilled in Dec 2011. Cumulative oil production for the well is 5,497 STB and the well has been off line since Dec 2012. The reservoir was found to be of poor quality. Gretel II, was drilled in January 2012 and fracture stimulated in March 2012. This well was drilled on the north side of the Brockton Fault zone, which may define the western edge of the continuous Bakken oil accumulation. The Gretel II has produced oil, but with a high water cut. Because of this, the well is uneconomic and thus is shut-in. The well cost SSN \$13m and was a significant negative result given the funds invested. Following these well results SSN decided to exit the project and in June 2013 entered into a sale agreement to sell its interests for \$13.5m. The transaction was expected to close in July however failed to close due to the buyer having insufficient funding. In Dec 2013 SSN announced that it has entered into a farm out agreement with Momentum Energy Corp a Canadian E&P company who will undertake a 20 square mile 3D seismic survey and one Horizontal well valued at \$10m. <p>SSN's has entered into a farmout agreement with Momentum Energy who are planning to acquire a 20 square mile 3D seismic grid and drill a middle Bakken well. This farmin will materially bring forward the evaluation of this holding and whilst a cash deal might have been preferred, the retained equity in this large acreage holding (15,000 net acres is meaningful)</p>

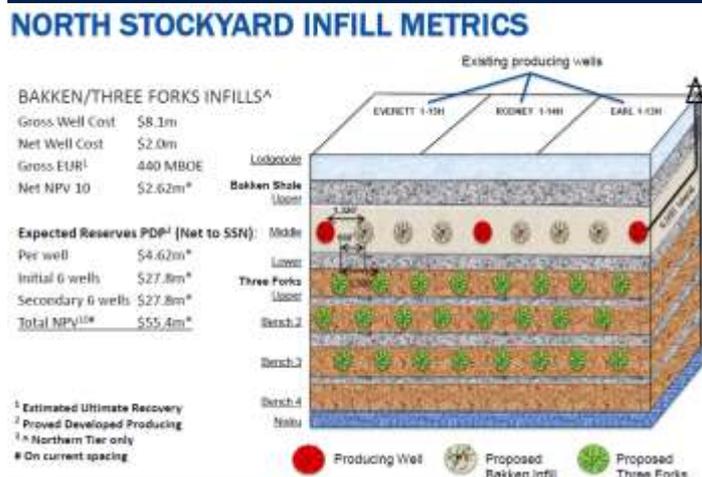
Other projects USA

- SSN holds interests in 4 legacy assets which are not a core area of focus:

Project	Details
State GC Oil Field	New Mexico conventional gas asset, 27% interest generates 31mscf/d, 33bopd per qtr
Sabretooth Gas Field	Texas based conventional gas asset, held at 27% interest generates 4mmscf/d 39bopd per qtr
Greens Canyon	Wyoming based asset held 100% in Exploration phase 4,520 acres
Flaming George	Wyoming based asset held 100% in Exploration phase 4,520 acres

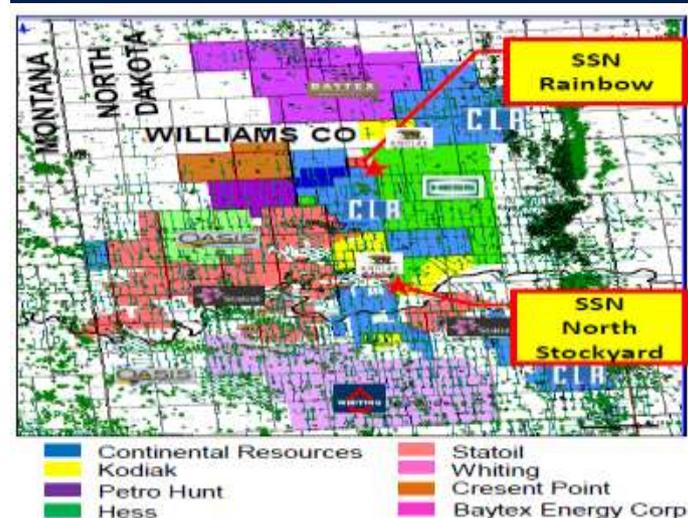
SSN's legacy assets provide a small amount of cash flow with limited capital obligation for SSN.

Figure 8: North Stockyard Well programme



Source: SSN Company Announcements

Figure 9: Rainbow & North Stockyard Projects



Source: SSN Company Announcements

Bakken and Three Forks Formations

Background

The Bakken-Three Forks formation is situated within the Williston Basin which covers 300,000 square miles across the states of North Dakota, South Dakota, Montana and the Canadian province of Saskatchewan (see Figure 10). Oil in the Bakken shale formation was first discovered back in 1951, and the name "Bakken" originates from a North Dakota farmer, Henry Bakken, who owned the land where the first well encountered the Bakken formation. However like other shale formations, the Bakken wasn't a viable source of hydrocarbon production until recently because of the difficulty in extracting oil using conventional drilling methods. The Bakken is composed of three shale layers or benches with different geological characteristics and thickness: the upper shale, middle dolomite and lower shale. The middle layer is the most productive layer for hydrocarbon production and is located at a depth of around 10,000 ft. Directly below the Bakken, there is a 270ft thick formation known as the Three Forks-Sanish Formation (Three Forks). For some time, drillers believed that the Three Forks only contained oil that seeped out of the Bakken Shale. However, recent drilling results suggest that the Three Forks is a separate oil-bearing formation that could contain hydrocarbon resources rivaling those of the Bakken Shale. The prospect of having two layers of independent oil-producing formations has been an encouraging discovery for producers, who now stand to benefit from not one, but two productive formations on their properties.

The Bakken formation has produced oil since 1953, when a North Dakota well was completed in the Bakken. The 2000 discovery of the Elm Coulee Oil Field, Richland County, Montana, where production is expected to ultimately total 270 mmbbl drew a great deal of attention to the trend where oil was trapped along the Bakken pinchout. Elm Coulee was key to later Bakken development because it combined horizontal wells and hydraulic fracturing, and targeted the dolomitic middle Bakken member rather than the shales of the upper or lower Bakken. New interest developed in 2006 when EOG Resources reported that a single well it had drilled into an oil-rich layer of shale near Parshall, North Dakota was anticipated to produce 700kbbbl of oil. At Parshall, the abrupt eastern limit of the field is formed by the extent of thermally mature Bakken shale as shale farther east is thermally immature. The Parshall Oil Field discovery, combined with other factors, including an oil-drilling tax break enacted by the state of North Dakota in 2007, shifted attention in the Bakken from Montana to the North Dakota side. The number of wells drilled in the North Dakota Bakken jumped from 300 in 2006 to 457 in 2007. This was the real beginning of the US shale oil revolution.

The great increases in oil and gas production have exceeded the areas's pipeline capacity to transport hydrocarbons to markets as there is only one refinery in the area. The result has been that the oil and gas prices received have been much lower than the normal WTI oil price. The shortage of pipeline capacity has caused some producers to ship oil out of the area by more expensive methods of truck or railroad. The oil boom has also given those who own mineral rights large incomes from lease bonuses and royalties and has reduced unemployment and given the state of North Dakota a billion-dollar budget surplus. North Dakota, which ranked 38th in per capita gross domestic product (GDP) in 2001, rose steadily with the Bakken boom, and now has per capita GDP 29% above the national average. The industrialization and population boom has put a strain on water supplies, sewage systems, and government services of the small towns and ranches in the area.

Production & Resource potential – 1mmbopd/ 7.4bn bbl oil potential

The Bakken has emerged in recent years as one of the most important sources of oil in the USA. Most new Bakken drilling and production has been in North Dakota, although the play also extends into Montana, Saskatchewan, and Manitoba. As of 2013, the Bakken produced more than 10% of all US oil production with the application of hydraulic fracturing technology causing the boom in Bakken production since 2000. By the end of 2010 oil production rates had reached 458kbopd, 550kbopd by end 2011 and 770kbopd by end 2012 outstripping the pipeline capacity to ship oil out of the Bakken. In November 2013, the US EIA projected that Bakken production would exceed 1 million barrels per day in December 2013 and as a result the Bakken, North Dakota is the second oil-producing state in the US, behind only Texas with production forecast to grow to 1.8mbpd by 2017. Approximately 450mmbbl of oil have been produced from the Bakken and Three Forks formation since 2008. In April 2008, a US Geological Survey (USGS) report estimated the amount of recoverable oil using technology readily available at the end of 2007 within the Bakken Formation (excluding Three Forks) at 3.0 to 4.3 billion barrels, with a mean of 3.65 billion. An April 2013 update to this estimate (based on over 4,000 wells drilled and now including the Three Forks formation) by the USGS resulted in a significant increase with a projection that 7.4 billion barrels of undiscovered oil can be recovered from the Bakken and Three Forks formations, 6.7 tcf of natural gas and 530mmbbl of natural gas liquids using current technology. The increase is mainly due to including the Three Forks resource potential of 3.7bn bbl. Some Industry insiders suggest however that this figure is too low with potentially 24bn bbl oil recoverable. This considerable increase has been made possible by the combined use of horizontal drilling, hydraulic fracturing, and a large number of wells drilled. While these technologies have been consistently in use since the 1980s, the Bakken trend is the place where they are being most heavily used: 150 active rigs in the play and approximately 1,800 wells added per year.

Geology

The **Bakken formation** is a rock unit from the Late Devonian to Early Mississippian age occupying about 200,000 square miles (520,000 km²) of the subsurface of the Williston Basin. The formation is entirely in the subsurface, and has no surface outcrop. It is named after Henry Bakken, a farmer in Tioga, North Dakota who owned the land where the formation was initially discovered, in a boring for oil. Besides being a widespread prolific source rock for oil when thermally mature, there are also significant producible reserves of oil within the Bakken formation itself. The rock formation consists of three members: lower shale, middle dolomite, and upper shale. The shales were deposited in relatively deep anoxic marine conditions, and the dolomite was deposited as a coastal carbonate bank during a time of shallower, well-oxygenated water. The middle dolomite member is the principal oil reservoir, roughly two miles (3.2 km) below the surface. Both the upper and lower shale members are organic-rich marine shale. Most Bakken wells are drilled and completed in the middle member. Many wells are now being drilled and completed in the basal Sanish/Pronghorn member and in the underlying Three Forks Formation, which the North Dakota Department of Mineral Resources treats as part of the Bakken for oil production statistical purposes. Porosities in the Bakken averages about 5%, and permeabilities are very low, averaging 0.04 millidarcies—much lower than typical oil reservoirs, in today's terms a light tight oil play. However, the presence of

vertical to sub-vertical natural fractures makes the Bakken an excellent candidate for horizontal drilling techniques in which a well drills horizontally along bedding planes, rather than vertically through them. In this way, a borehole can contact many thousands of feet of oil reservoir rock in a unit with a maximum thickness of only about 140 feet.

Source: US Geological Society, Belfer Centre for Science and International Affairs, Various Oil & Gas Industry journals and papers.

Figure 10: Bakken Formation location

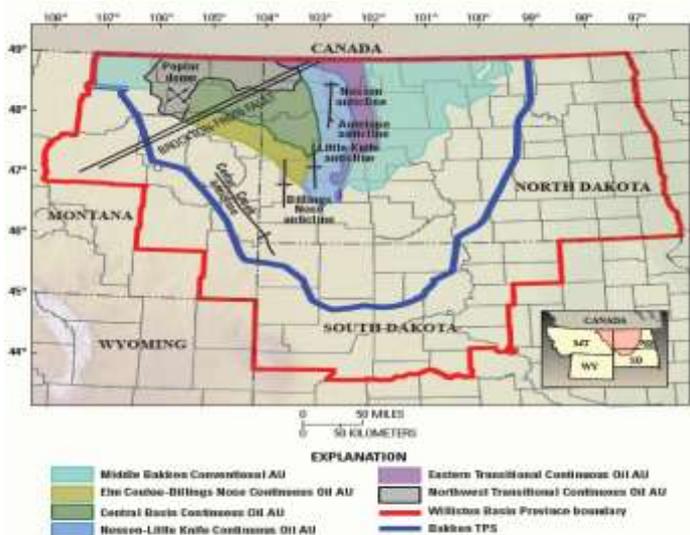
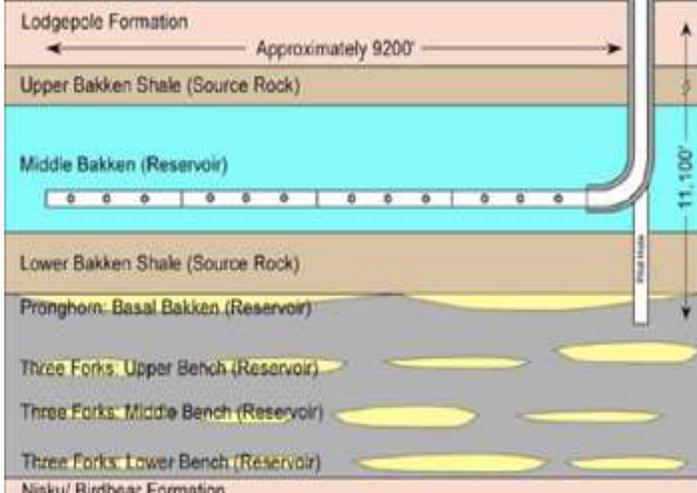


Figure 1. Map showing the Williston Basin Province, Bakken Total Petroleum System (TPS), and the Bakken Formation Assessment Units (AUs). Major structural features are also shown. Inset map shows location of the Bakken TPS (pink).

Source: US Geological Survey reports

Figure 11: Bakken Stratigraphy



Source: CREDO Petroleum presentation

Industry Activity – Bakken play

The **Bakken Shale** ranks as one of the largest oil developments in the U.S. in the past 40 years. The play has single-handedly driven North Dakota's oil production to levels four times higher than previous peaks in the 1980s. As of 2012, ND is second to Texas in terms of oil production and boasts the lowest unemployment rate in the country at ~3%. While the *Bakken* experienced multiple small scale booms over the past 60 years, it was a horizontal well drilled in the Elm Coulee Field by a partnership between Lyco Energy and Halliburton that incited the modern boom. The Elm Coulee was proven economic in 2003 and operators began expanding into North Dakota after EOG's Parshall discovery in 2006. The play was driven by innovations and small to mid size exploration and production companies which have subsequently become significant producers in their own right led by Continental Resources and Whiting Oil & Gas who exclusively owe their current status as relatively big companies to the success achieved in shale oil. The top 12 Bakken producers are outlined in Figure 12 below with the operator of the Samson projects, Slawson Exploration, producing at 19,639bpd.

Drilling intensity is a key point to understand in the evolution of the shale oil boom with the boom mostly a function of bringing as many wells as possible on line due to the dramatic decline in production that follows the early months of activity with each new well. In Dec 2012 it took about 90 new producing wells per month (1000 per year) just to maintain the Bakken production at 770,000bopd as outlined in figure 13. With 1600 new producing wells brought online from an average 190 active drill rigs in the play. Shale oil wells in the Bakken produce in excess of 100kbbbl on average in the first year with an EUR of 148-353mbl per well. Wells costs average between \$8-\$10.5m and average initial production rates from the Bakken have more than doubled between 2007 and 2012 from 4,000bbl to more than 11,000bbls IP30 day rate.

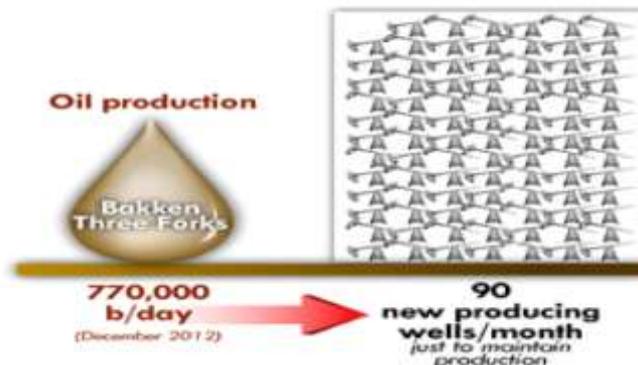
Figure 12: Top Bakken Producers

Company	BDP*
1 Continental Resources, Inc.	72,145.4
2 Whiting Oil and Gas Corporation	66,783.7
3 Hess Corporation	66,265.3
4 EOG Resources, Inc.	46,227.6
5 Statoil Oil & Gas LP	42,907.4
6 Marathon Oil Company	38,121.6
7 XTO Energy Inc. (ExxonMobil)	37,433.2
8 Kodiak Oil & Gas (USA), Inc.	27,096.3
9 Oasis Petroleum North America LLC	24,110.0
10 Burlington Resources Oil & Gas Company, LP (ConocoPhillips)	22,543.0
11 Slawson Exploration Company, Inc.	19,639.9
12 QEP Energy Company	19,240.2

Source: Petroleum News Bakken

Figure 13: Bakken Drilling Intensity

Figure 2. Drilling intensity: The case of Bakken-Three Forks



Source: The Shale Oil Boom: A US Phenomenon: Leonardo Maugeri

Reserves and Resources

SSN has 2P reserves of 3.7mmboe split 3.0mm bbl oil and 3.88bcf gas associated with the North Stockyard and Rainbow projects. The reserves increased from 0.9mmboe from 2012 as a result of increased drilling density in the North Stockyard project and the acquisition of the Rainbow project. Both projects have more drilling locations than met the definition of proved undeveloped locations and have been recognised as probable. These reserves are attributable to the Middle Bakken zone in the North Stockyard and Rainbow projects with significant additional resource potential from the Three Forks zone which is only now beginning to be developed. Further additional upside potential comes from the exploration of the Hawk Springs project covering 21,000 net acres and contains the potential for significant recoverable resources of over 30mmbo based on early stage seismic interpretation. We envisage SSN will generate reserves growth through an extensive infill drilling campaign and the conversion of the resource potential at Hawk Springs to Reserves (i.e. de-risked through successful exploration & appraisal). The Resource estimates are detailed in Figure 14 below:

Figure 14: Net SSN Reserves & Resources						
Project	Proved Reserves		Probable Reserves		2P Reserves total	
	Oil (mmbbl)	Gas (bcf)	Oil (mmbbl)	Gas (bcf)	Oil (mmbbl)	Gas (bcf)
North Stockyard Project	0.56	0.68	1.30	1.46	1.87	2.15
Rainbow project	0.56	0.82	0.45	0.46	1.02	1.29
Other	0.13	0.41	0.20	0.29	0.14	0.44
Total	1.27	1.98	1.75	1.95	3.03	3.88
Total (mmboe)	1.59		2.08		3.67	

Source: SSN Company Announcements
 *Reserves as estimated by SSN using data from last annual update from Independent Reserve auditors Ryder Scott as at 30 June 2013.

Shareholder Structure

SSN has a significant 2547.6m shares on issue and has no substantial shareholders. A share consolidation to reduce the sizeable number of shares on issue would be a recommended path for SSN to follow. SSN directors and management hold approximately 7% of fully diluted shares outstanding. SSN has 299m options outstanding with the majority of the options related to the recent share placement: 229m options 1.4c out-of-the-money. Details are as follows:

Holder	Number	Exercise Price	ExpiryDate
Various	1,000,000	20c	31/12/12
Various	29,000,000	8c	31/01/13
Various	31,500,000	8c	31/10/13
Various	4,000,000	16.4c	31/10/13
Various	4,000,000	15.5c	31/10/13
Various	229,678,528	3.8c	31/12/13
Total	299,178,528		

Management

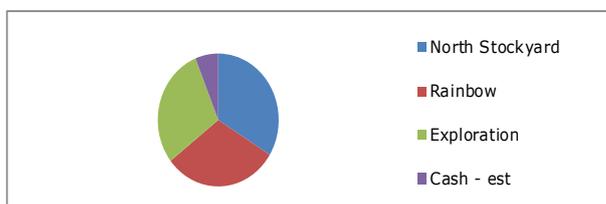
The SSN board and management team have a proven track record in developing emerging oil & gas companies. CEO Terry Barr has over 30 yrs experience in the oil and gas industry and key members of the board bring E&P and strong resources capital markets experience to SSN. Key members of the team are as follows:

Name	Position	Key details
Dr Victor Rudenno	Chairman (Non Executive)	<ul style="list-style-type: none"> Appointed as a director of SSN in April 2007. Over 25 years of experience in the mining and financial services industry associated with mining and mineral exploration Co Founder Equity Capital Markets Ltd. and serves as Director Specialties in mining economics, geo-statistics, operations research, and minerals processing. He is currently an Executive Director of Revaluate Pty Limited and is a Senior Fellow of the Financial Services Institute of Australasia and a Fellow of the Australasian Institute of Mining and Metallurgy. Bachelor of Mining Engineering degree, a Master of Commerce degree and a Doctor of Philosophy for his thesis on Mining Economics.
Mr Terence Barr	Managing Director	<ul style="list-style-type: none"> Appointed Managing Director on 25 January 2005. Petroleum Geologist with 35 year of Industry experience Cooper Basin Exploration Manager for Santos Discovered and developed significant volumes of tight gas and oil Prior to joining SSN, employed as Managing Director by Ausam Resources from 1999 to 2003 and was the owner of Barco Exploration from 2003 to 2005.
Mr Gene McColley	Non Executive Director	<ul style="list-style-type: none"> Appointed on 4th October 2013 Co-founder and MD of Roaring Fork Capital Investment banking experience in small caps
Mr Keith Skipper	Non Executive Director	<ul style="list-style-type: none"> Non-executive director of SSN since September 2008. Exploration Geologist with 40 years experience in the oil and gas industry at both the operational and board level Significant experience in development and promotion of resource projects Founder of KS Management Services Inc. and PetroSedex Energy
Dr DeAnn Craig	Non Executive Director	<ul style="list-style-type: none"> Appointed as a Director of SSN on 11 July 2011. Chemical and Petroleum Engineering with over 30 years of industry experience Active member of the Colorado Oil and Gas Conservations Commission Progressed to Senior management for Phillips Petroleum (ConocoPhillips) and CNX Gas during her career. PhD from the Colorado School of Mines (USA). Masters of International Political Economy of Resources, Masters of Science Mineral Economics and Business and a Bachelor of Science Chemical and Petroleum Refining Engineering. In addition she holds an MBA from Regis University in Denver, Colorado.
Ms Robyn Lamont	Chief Financial Officer	<ul style="list-style-type: none"> Served as the Company's CFO since 1 May 2006, prior to which she served as Financial Controller since 2001. Chartered Accountant (CPA) with 10 years of oil and gas experience Competent with both IFRS and US GAAP Securities experience in both the US and Australian markets Bachelor of Commerce, majoring in Accounting and Finance. Qualified as a Chartered Accountant through the Institute of Chartered Accountants in Australia in 2001.
Mr David Ninke	Vice President Exploration	<ul style="list-style-type: none"> Appointed Vice President, Exploration of Samson effective April 1, 2008. Exploration Geologist/Geophysicist with 19 years of Industry experience Proven oil & gas finding track record for Aspect Energy, BP and Killam Oil Numerous discoveries in the Texas Gulf Coast Basin, Permian Basin, Alaska North Slope, and the Rockies Bachelor's and Master's degrees in Geology from Wittenberg University and Bowling Green State University, respectively.
Mr Daniel Gralla	Vice President Engineering	<ul style="list-style-type: none"> Commenced working for Samson in 2009 and was appointed Vice President of Engineering effective January 1, 2011. Reservoir Engineer with 28 years of Industry experience Field Development & Operations for Phillips Petroleum Co, Arco Oil & Gas Reservoir Development and Planning

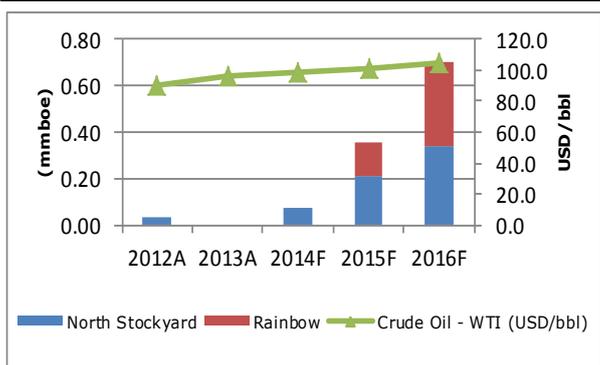
Sampson Oil & Gas Ltd		\$0.03	
Valuation	A\$m	A\$/sh	
North Stockyard	58	0.03	
Rainbow	52	0.02	
Exploration	50	0.02	
Corporate	(43)	(0.02)	
Cash	10	0.00	
Debt	(13)	(0.01)	
Total @ 10% Discount Rate	115	0.05	
Price Target		0.05	

Price Target Sensitivity	-10%	0%	+10%
Oil Price Sensitivity (A\$/sh)	0.04	0.05	0.06
Exchange Rate Sensitivity (A\$/sh)	0.06	0.05	0.05
Gas Price Sensitivity (A\$/sh)	0.05	0.05	0.05

Valuation Summary of Operating Assets



Sales Summary



Reserves as at 30 June 2013

	Oil/NGL's (mmbbl)	Gas (bcf)	Total (mmboe)
1P Reserves	1.3	1.9	1.6
2P Reserves	3.0	3.9	3.7

Board Members

Name	Position
Terence Barr	Managing Director
Victor Rudenko	Chairman
Keith Skipper	Non-Executive Director
DeAnn Craig	Non-Executive Director

Substantial Shareholders

	Shares (m)	%
Nil		

Commodity Assumptions	Year End June 30				
	2012A	2013A	2014F	2015F	2016F
Gold	1.02	0.99	0.96	0.94	0.91
Crude Oil - WTI (USD/bbl)	90.00	96.66	98.60	100.57	104.63
Gas Price Assumptions (US\$)	4.00	4.05	4.13	4.22	4.39

Sales Summary	2012A	2013A	2014F	2015F	2016F
Gas (bcf)					
North Stockyard	0.06	0.00	0.02	0.07	0.11
Rainbow	0.00	0.00	0.00	0.05	0.12
Total (bcf)	0.06	0.00	0.02	0.11	0.22
Liquids (mmbbl)					
North Stockyard	0.02	0.00	0.07	0.20	0.32
Rainbow	0.00	0.00	0.00	0.14	0.35
Total (mmbbl)	0.02	0.00	0.07	0.34	0.67
Total (mmboe)	0.03	0.00	0.07	0.36	0.70

Profit & Loss (US\$m)	2012A	2013A	2014F	2015F	2016F
Sales Revenue	8.4	5.8	5.4	33.7	52.6
Other Income	0.4	0.5	0.0	0.0	0.1
Operating Costs	5.4	5.4	0.1	1.8	3.5
Exploration Exp.	30.5	7.9	0.0	0.0	0.0
Corporate/Admin	8.6	6.8	5.4	4.6	4.7
Royalties	0.0	0.0	0.0	0.0	0.0
EBITDA	(35.7)	(13.8)	(0.0)	27.3	44.5
Depn & Amort	0.0	0.0	0.4	1.8	3.1
EBIT	(35.7)	(13.8)	(0.4)	25.4	41.4
Interest	0.0	0.0	0.2	0.6	0.6
Abnormals Pre-Tax	0.0	0.0	0.0	0.0	0.0
Operating Profit	(35.8)	(13.9)	(0.6)	24.8	40.8
Tax expense	(4.7)	(2.0)	0.0	0.0	6.6
Minorities	0.0	0.0	0.0	0.0	0.0
FX Adjustment	(0.3)	(0.8)	0.0	0.0	0.0
NPAT	(31.4)	(12.6)	(0.6)	24.8	34.2
Abnormal Adjustment	0.0	0.0	0.0	0.0	0.0
Normalised NPAT	(31.4)	(12.6)	(0.6)	24.8	34.2

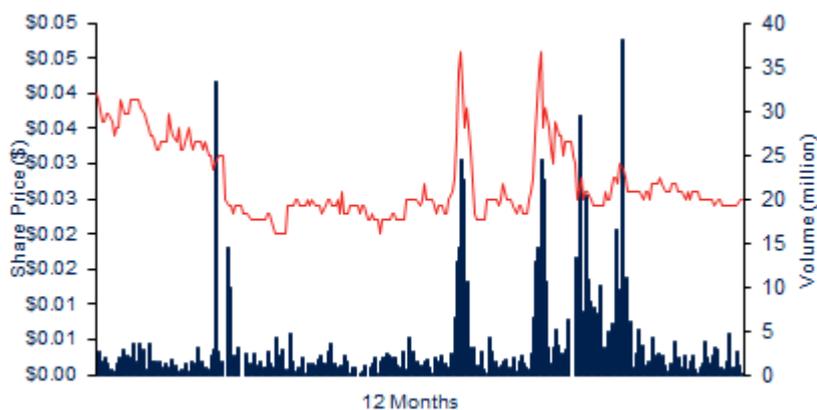
Cash Flow (US\$m)	2012A	2013A	2014F	2015F	2016F
Adjusted Net Profit	(31.4)	(12.6)	(0.6)	24.8	34.2
+ Interest/Tax/Expl Exp	25.8	5.9	0.2	0.6	7.2
- Interest/Tax/Expl Inc	0.0	0.0	0.2	0.6	7.2
+ Depn/Amort	0.0	0.0	0.4	1.8	3.1
+/- Other	8.4	8.9	0.0	0.0	0.0
Operating Cashflow	2.8	2.2	(0.2)	26.6	37.3
- Capex (+asset sales)	42.7	17.4	13.3	29.9	30.8
- Working Capital Increase	0.0	0.0	0.0	0.0	0.0
Free Cashflow	(39.9)	(15.2)	(13.5)	(3.2)	6.5
- Dividends (ords & pref)	0.0	0.0	0.0	0.0	0.0
+ Equity raised	0.6	9.1	0.0	0.0	0.0
+ Debt drawdown (repaid)	0.0	0.0	12.5	0.0	0.0
+ Other	0.0	0.0	0.0	1.0	2.0
Net Change in Cash	(39.3)	(6.2)	(1.0)	(3.2)	6.5
Exchange Rate effects	(0.3)	0.5	0.0	0.0	0.0
Cash at End Period	18.8	13.2	3.4	0.2	6.7
Net Cash/(Debt)	18.8	13.2	(9.1)	(12.3)	(5.8)

Balance Sheet (US\$m)	2012A	2013A	2014F	2015F	2016F
Cash	18.8	13.2	3.4	0.2	6.7
Total Assets	54.7	51.6	63.1	88.2	122.7
Total Debt	0.0	0.0	12.5	12.5	12.5
Total Liabilities	7.9	8.3	20.4	20.5	20.9
Shareholders Funds	46.8	43.3	42.8	67.7	101.8

Ratios

Net Debt/Equity (%)	na	na	21.2	18.1	5.7
Interest Cover (x)	-1091.1	-281.4	-2.6	41.5	67.5
Return on Equity (%)	na	na	na	36.7	33.6

Recommendation History



Date	Type	Target Price	Share Price	Recommendation	Return

Stock recommendations: Investment ratings are a function of Patersons expectation of total return (forecast price appreciation plus dividend yield) within the next 12 months. The investment ratings are Buy (expected total return of 10% or more), Hold (-10% to +10% total return) and Sell (> 10% negative total return). In addition we have a Speculative Buy rating covering higher risk stocks that may not be of investment grade due to low market capitalisation, high debt levels, or significant risks in the business model. Investment ratings are determined at the time of initiation of coverage, or a change in target price. At other times the expected total return may fall outside of these ranges because of price movements and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. This Document is not to be passed on to any third party without our prior written consent.

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