# PERMIAN BASIN PROJECT
# EARLY-ENTRY, LOW-COST RESOURCE PLAY

7,000 Net Acres Committed

Additional 3,000 to 4,000 Ready To Lease

First well planned, AFE ~ $7.8 million, 1.5 mile lateral

For a complete presentation, please contact:

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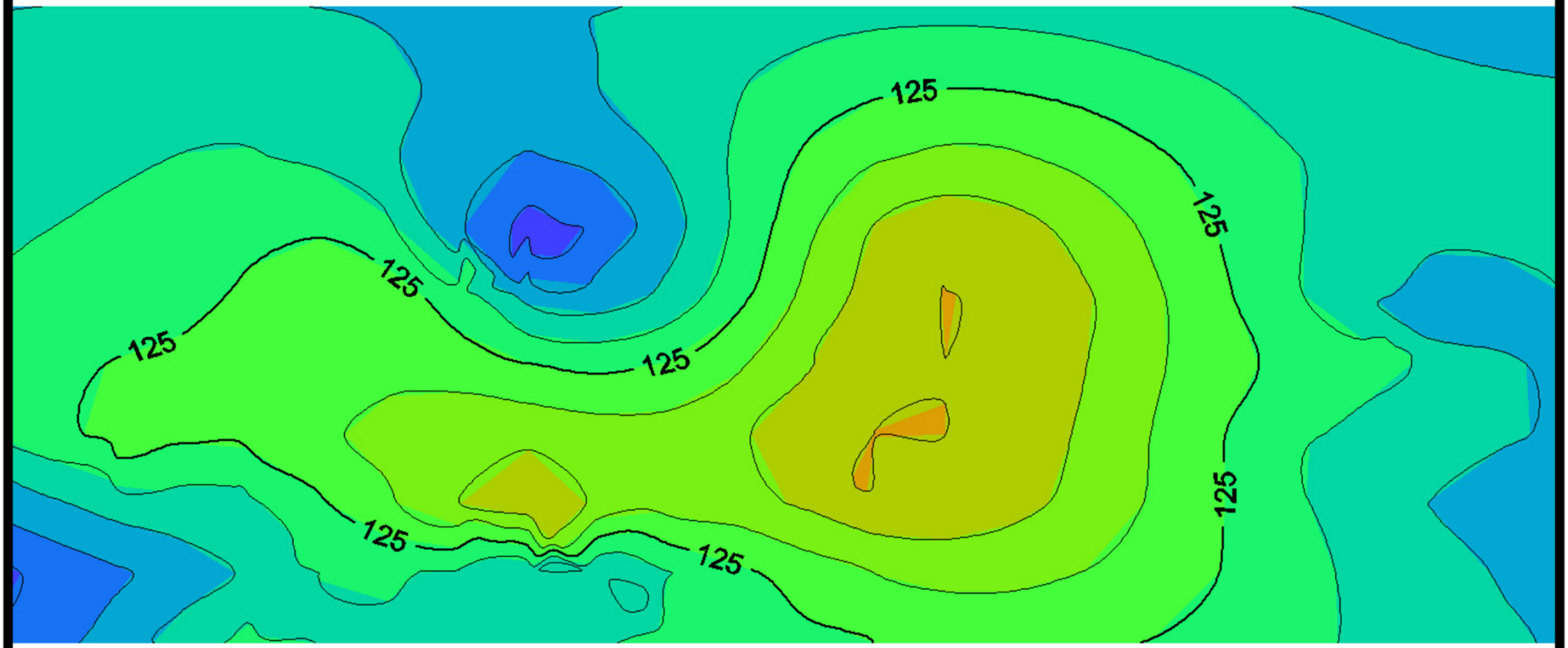
# EXECUTIVE SUMMARY

In 2010, a well was drilled that identified live oil when penetrating the Wolfcamp B interval and again in the Wolfcamp C interval. Said live oil was observed in the pits and shale shaker at the surface. Excellent shows were also observed in the Wolfcamp A and Lower Sprayberry, as well. These observations were noted and filed for later use.

The horizontal resource play had begun and was becoming a hotbed of activity. Numerous conferences and workshops were presented on the play. The same basic observations were made in the Wolfcamp intervals, oil to the surface and high OOIP content from petrophysical analysis.

The Permian Basin continued to develop and leasehold became available. The logs underwent petrophysical analysis yielding excellent results with 42MBO OIP/Sec in the Lower Sprayberry, 54MBO OIP/Sec in the Wolfcamp B and 23 MBO OIP/Sec in the Wolfcamp C with very low clay content. All zones have positive oil shows on mudlogs. Complete mapping and geologic review yielded positive DST results in the Wolfcamp, over 1.6MMBO were produced from one vertical Wolfcamp well and additional petrophysical analysis extended and confirmed the area, see the following. Sample analysis of the key well and a second well show excellent resource lithology and extend the mature vitrinite reflectance (Ro) mapping unknown to the industry. The aerial extent of the project has now grown to over 44,000 aces. Title is complete on 21 sections and leasing is underway. The project can be initiated with approximately 9,000 acres.




**Currently Leasing:**

**Twenty square mile area 44,000 acres total**

**Five pay zones in the Lower Sprayberry & Wolfcamp**

**Approximately 40.6 MMBO recoverable per section**

**Over 2.7 BBO Recoverable over entire project**

**Contact:**

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| **HYDROCARB-EN, L.L.C.** | | |
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| **Permian Basin Project**<br>**Texas** | | |
| Author:<br>K. Kolar | | Date:<br>10 January, 2019 |
| | Scale:<br>NA | |

# RESERVE ESTIMATES FROM PETROPHYSICAL ANALYSIS OF KEY WELLS

| Zone | | Summaries | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DEPTH | GROSSFT | PAYFT | RANK | CLAY | PHIE | SW | PERMSH | HydPorFT | PERMSHF | TOC | OIP |
| FT | | | | DEC | DEC | DEC | uD | POR-FT | uD-FT | % | MMBO/sec |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| SPRABERRY U | 146 | 80 | 3.0 | 0.100 | 0.038 | 0.383 | 0.075 | 3.55 | 10.9702 | 1.585 | 13.555 |
| SPRABERRY L | 419 | 229 | 3.0 | 0.084 | 0.038 | 0.331 | 0.093 | 11.21066 | 39.0359 | 1.490 | 42.787 |
| WOLFCAMP A | 212 | 85 | 2.9 | 0.101 | 0.031 | 0.383 | 0.079 | 4.694 | 16.7201 | 0.908 | 17.913 |
| WOLFCAMP B | 332 | 268 | 2.8 | 0.179 | 0.051 | 0.219 | 0.250 | 14.206 | 82.8895 | 2.090 | 54.248 |
| WOLFCAMP C | 228 | 121 | 3.0 | 0.121 | 0.037 | 0.352 | 0.111 | 6.022 | 25.2218 | 1.758 | 22.982 |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| | TOT | TOT | AVGX | AVGX | AVGX | AVGX | AVGX | CUM | CUM | AVGX | CUM |

- Wolfcamp B – **54.248**MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec **=10,849,600BO Per Section, 1,356,200BO Per Lateral**
- L Sprayberry – 42.787MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec **= 8,557,400BO Per Section, 1,069,675BO Per Lateral**
- Wolfcamp C – 22.982MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec **= 4,596,400BO Per Section, 574,550BO Per Lateral**
- Wolfcamp A – 17.094MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec **= 3,582,600BO Per Section, 447,825BO Per Lateral**

| Zone | GROSSFT | PAYFT | RANK | CLAY | PHIE | SW | PERMSH | HydPorFT | PERMSHF | TOC | OIP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| FT | | | | DEC | DEC | DEC | uD | POR-FT | uD-FT | % | MMBO/sec |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| SPRABERRY L | 419 | 229 | 2.991266 | 0.083723 | 0.037513 | 0.330716 | 0.093164 | 16.105 | 52.6951 | 1.489644 | 42.787 |
| SPRABERRY U | 255 | 91 | 3 | 0.093725 | 0.032961 | 0.449961 | 0.054001 | 0.101 | 0.2354 | 1.275271 | 18.917 |
| WOLFCAMP A | 198 | 81 | 2.938272 | 0.101566 | 0.031753 | 0.373081 | 0.08131 | 4.629 | 16.9535 | 0.938788 | 17.094 |
| WOLFCAMP B | 346 | 272 | 2.834559 | 0.175665 | 0.050095 | 0.231879 | 0.241359 | 9.453 | 58.859 | 2.024581 | 55.067 |
| WOLFCAMP C | 228 | 121 | 2.958678 | 0.120658 | 0.03693 | 0.351623 | 0.110622 | 6.905 | 34.1497 | 1.757943 | 22.982 |
| | | | | | | | | | | | 156.847 |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| | TOT | TOT | AVGX | AVGX | AVGX | AVGX | AVGX | CUM | CUM | AVGX | CUM |

- Wolfcamp B – 47.69MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec = **9,538,000BO Per Section, 1,192,250BO Per Lateral**
- L Sprayberry – 102.853MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec = **20,570,600BO Per Section, 2,571,325BO Per Lateral**
- Wolfcamp C – 24.411MMBO/sec X 0.20 Recovery Factor / 8 Laterals/sec = **4,882,000BO Per Section, 610,250BO Per Lateral**