

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

**7,000 Net Acres Leased**

**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:**

**Kirk Kolar**

**Geologist**

**Hydrocarb-En, LLC**

**P.O. Box 6844**

**Edmond, OK 73083**

**Ph: 405/203-5975**

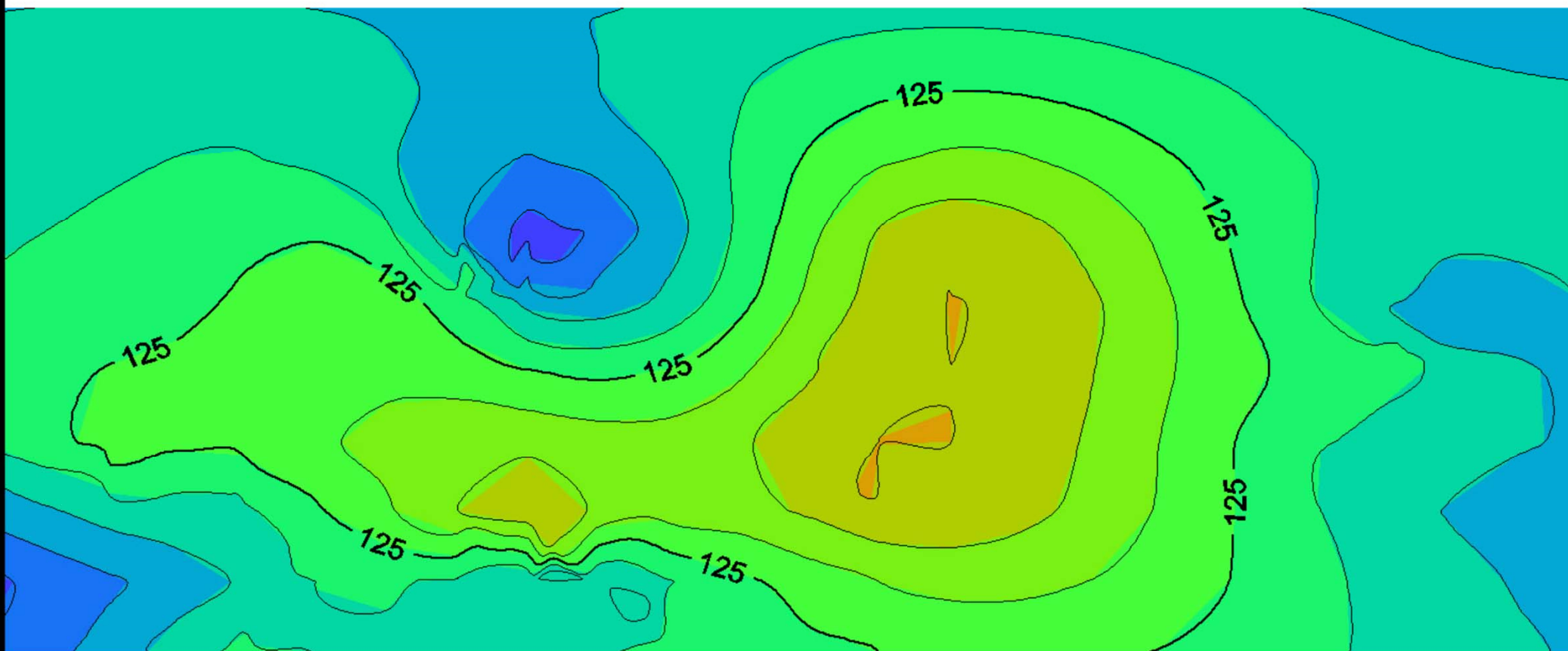
**E-mail: [kkolar@hydrocarb-en.com](mailto:kkolar@hydrocarb-en.com)**

# 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 acres. 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:**

**Kirk Kolar, [kkolar@hydrocarb-en.com](mailto:kkolar@hydrocarb-en.com)**

**Ph: 405/203-5975**

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

# RESERVE ESTIMATES FROM PETROPHYSICAL ANALYSIS OF KEY WELLS

Zone	Summaries										
DEPTH FT	GROSSFT	PAYFT	RANK	CLAY DEC	PHIE DEC	SW DEC	PERMSH uD	HydPorFT POR-FT	PERMSHF uD-FT	TOC %	OIP MMBO/sec
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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
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TOT	TOT	AVGX	AVGX	AVGX	AVGX	AVGX	AVGX	CUM	CUM	AVGX	CUM

- Wolfcamp B – 54.248MMBO/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
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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
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TOT	TOT	AVGX	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**