

# WEBB COUNTY 2016 GAS & OIL APPRAISED VALUE OUTLOOK

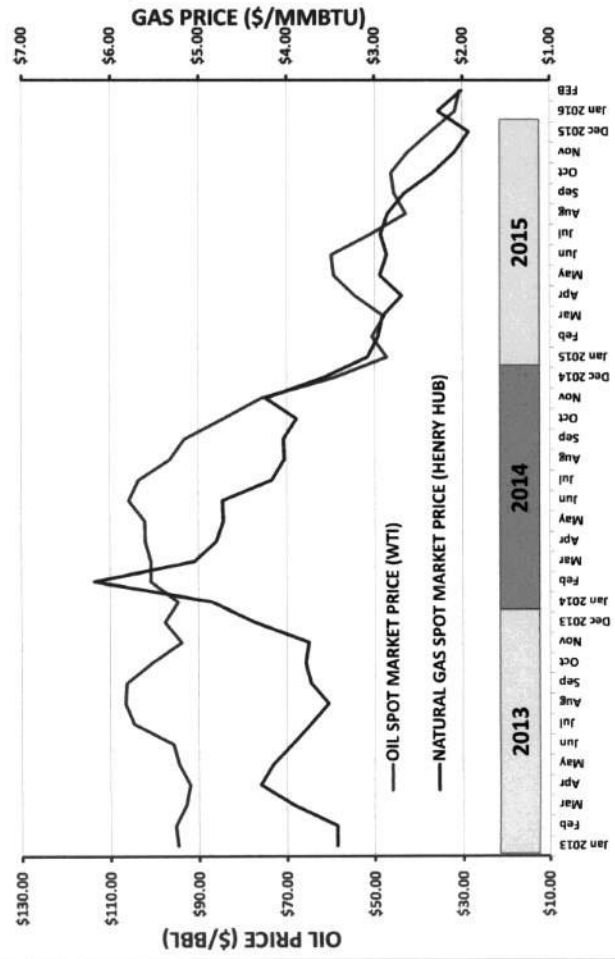
Charles R Williams, PE, RPA  
Wardlaw Appraisal Group, LC

## 2016 GAS & OIL APPRAISED VALUES OUTLOOK

### CAVEAT

County wide mineral appraised values are the totals from the appraisal of over 6000 individual wells. Final prices, production, expenses or ownership of the individual wells are not yet available. So, the appraisals have not yet been developed. The information we are providing is based on general macro trends. Any values I provide should be viewed only as an indication of the anticipated trend; not as an expected final result.

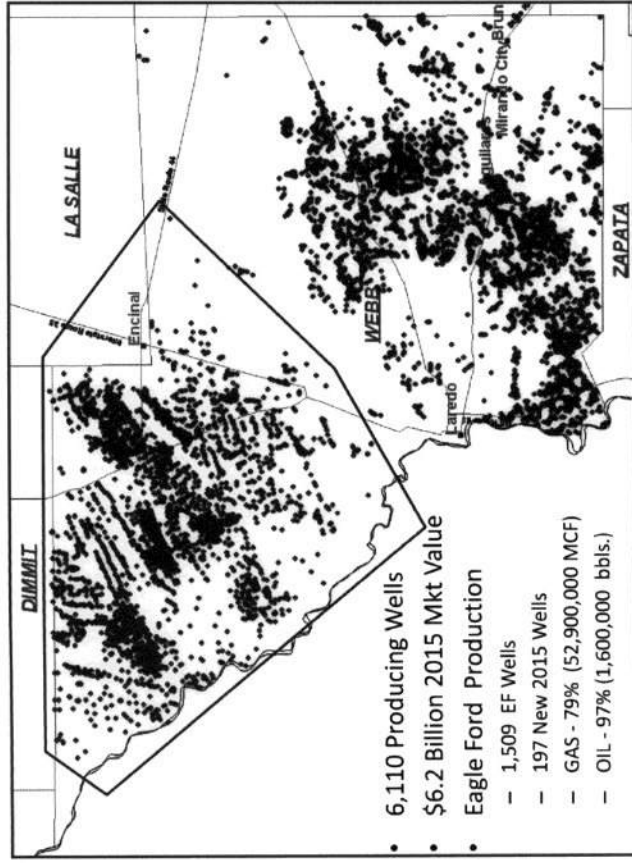
## RECENT OIL & GAS PRICE HISTORY



## NEW PRODUCING WELLS BY YEAR BY FORMATION

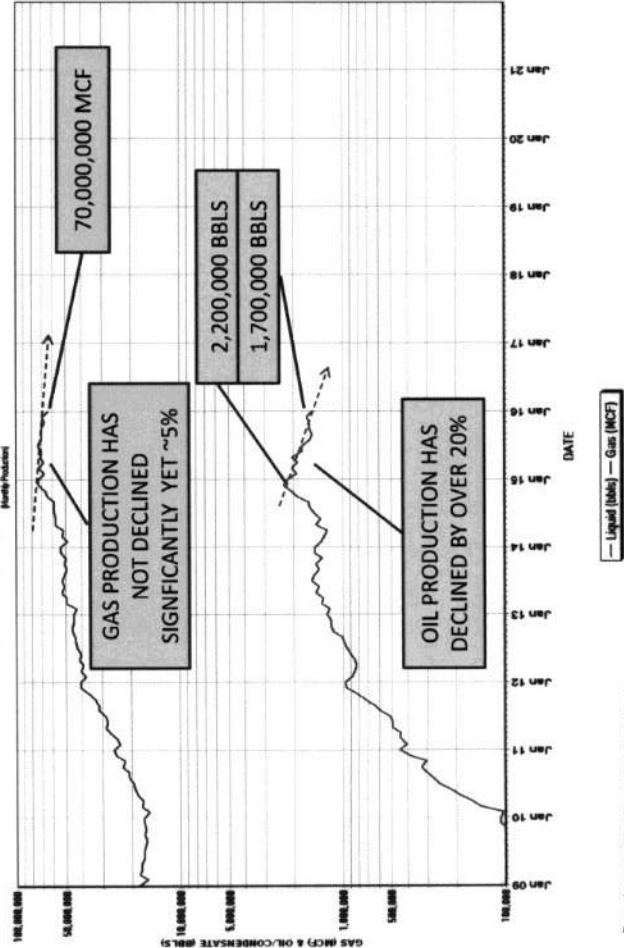
YEAR	NEW WELLS BY FORMATION		
	EAGLE FORD	OLMOS	OTHER
2009	11	98	100
2010	107	117	69
2011	237	81	43
2012	277	82	31
2013	300	95	15
2014	398	84	17
2015	197	23	9

# WEBB COUNTY PRODUCING WELLS



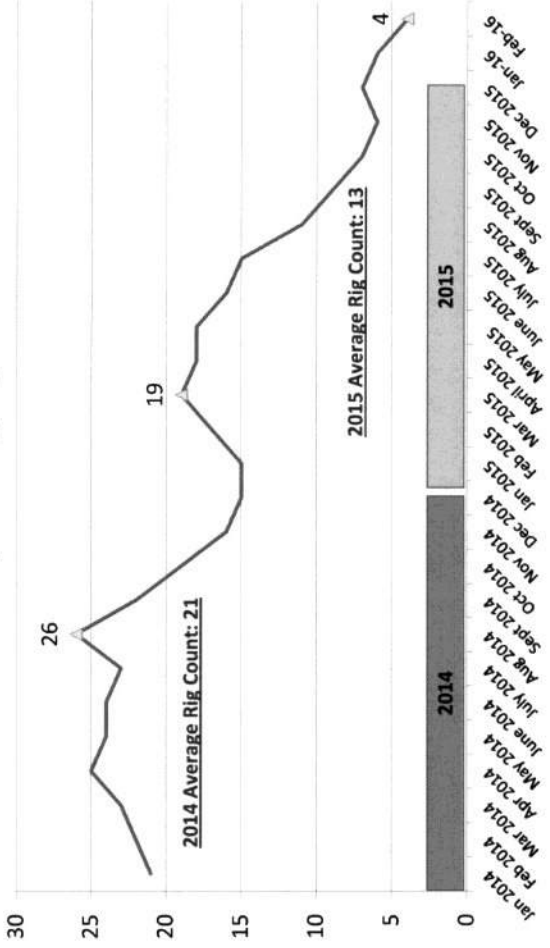
- 6,110 Producing Wells
- \$6.2 Billion 2015 Mkt Value
- Eagle Ford Production
  - 1,509 EF Wells
  - 197 New 2015 Wells
  - GAS - 79% (52,900,000 MCF)
  - OIL - 97% (1,600,000 bbls.)

# CURRENT WEBB PRODUCTION



Data Source: Wardlaw Appraisal Group

# Webb County Monthly Drilling Rig Count



Data Source: Baker Hughes

# HOW ARE OIL & GAS PROPERTIES APPRAISED?

## APPRAISED VALUES FOR OIL AND GAS WELLS

- WE ARE REQUIRED TO FOLLOW THE TEXAS PROPERTY TAX CODE (PTC)
- THE PTC SPECIFICALLY ESTABLISHES HOW OIL & GAS WELLS ARE APPRAISED

=====

### APPRAISED VALUE

= PRESENT VALUE OF PROJECTED FUTURE REVENUE

## OIL & GAS APPRAISED VALUE = PROJECTED FUTURE REVENUE

MONTHLY REVENUE = PRODUCTION X PRICE

LESS EXPENSES, DISCOUNTED

THEN TOTAL THE MONTHLY REVENUE FOR EACH MONTH OF THE WELL'S LIFE

TO CALCULATE, WE NEED

OIL & GAS STARTING PRODUCTION RATES

OIL & GAS PRICES

LEASE OPERATING EXPENSES

DISCOUNT RATE

OIL & GAS DECLINE RATES

## PROPERTY TAX CODE REQUIRED

### OIL & GAS APPRAISAL PRICE

MANDATES THE USE AND CALCULATION OF A 'PRICE ADJUSTMENT FACTOR' (PAF)

PRICE ADJUSTMENT FACTOR = 2016 PROJECTED U.S. AVERAGE PRICE  
(PAF)

2015 U.S. AVERAGE PRICE

THE 2015 AND 2016 AVERAGE OIL & GAS PRICES ARE PULLED FROM A JANUARY 2016 REPORT PUBLISHED BY THE U.S. GOVERNMENT'S ENERGY INFORMATION ADMINISTRATION

=====

### FOR EACH INDIVIDUAL LEASE IN WEBB COUNTY

2015 MONTHLY AVERAGE PRICE

2016 OIL/GAS APPRAISAL PRICE =

⌘

PRICE ADJUSTMENT FACTOR

## GAS REVENUE & PRICES

WEBB COUNTY GAS PRODUCTION, REVENUE & PRICING				
MONTH	SALES VOLUME	SALES REVENUE	SALES PRICE	SPOT MARKET PRICE
2014-08	52,494,591	\$303,769,669	\$5.78	\$3.91
2015-01	73,123,379	\$219,127,360	\$3.42	\$3.08
2015-12	64,803,624	\$137,026,660	\$2.11	\$1.93
<b>AVERAGE 2015 GAS SALES PRICE</b>		\$2.63		<b>\$2.69</b>
2016-2	N/A	N/A	N/A	\$2.01

Values in brown text are estimates

2015 AVERAGE PRODUCTION PRICE x PAF = 2016 AVERAGE GAS APPRAISAL PRICE

\$2.22 x 1.007 = \$2.24 / MCF

39% Decrease from 2015 Price of \$3.66 / MCF

# OIL REVENUE & PRICES

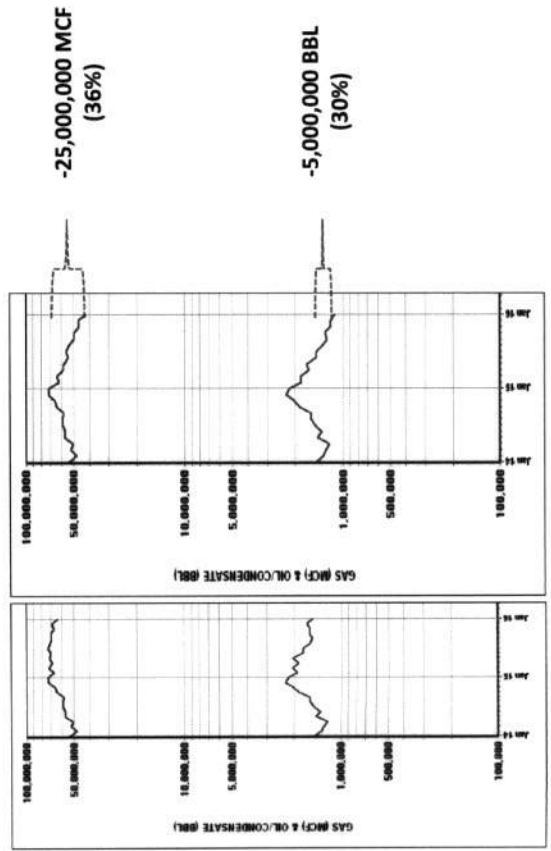
WEBB COUNTY OIL SALES VOLUMES, REVENUE & PRICING			
MONTH	SALES VOLUME	SALES REVENUE	WEBB SALES PRICE / SPOT MARKET PRICE
2014-08	1,611,985	\$133,997,020	\$83.13 / \$96.54
2015-01	1,794,478	\$60,002,898	\$33.44 / \$47.22
2015-12	1,480,434	\$35,879,570	\$24.23 / \$37.19
<b>AVERAGE 2015 OIL PRICE</b>			<b>\$48.69</b>
2016-3	N/A	N/A	< \$20.00 / \$30.25

Values in brown text are estimates

2015 AVERAGE PRICE x PAF = 2016 AVERAGE OIL APPRAISAL PRICE
\$37.64 x 0.791 = \$29.77
37% Decrease from 2015 Oil Appraisal Price of \$47.54 / BBL

Data Source: Texas Comptroller of Public Accounts

# IMPACT OF NEW 2015 WELLS



# WHAT WILL HAPPEN TO OIL & GAS APPRAISED VALUES?

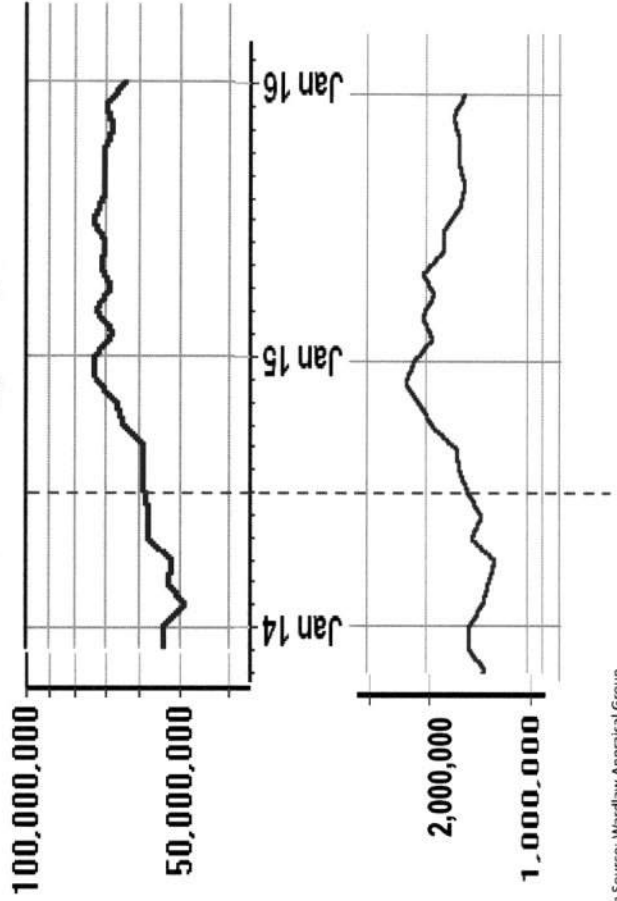
THE PRIMARY DATA USED TO DETERMINE APPRAISED VALUE ARE:

## PRODUCTION X PRICE

- OIL PRODUCTION HAS DECREASED BY 20%
- OIL PRICE HAS DECREASED BY 37%
- GAS PRODUCTION HAS DECLINED 5%
- GAS PRICE HAS DECREASED BY 39%

**ANTICIPATE 2016 OIL & GAS APPRAISED VALUES COULD DROP BY 50%**

# 2014-2015 ACTIVITY



Data Source: Wardlaw Appraisal Group