

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

March 6, 2008

Mabel Bennett

Re: Oil and Gas Lease  
SE/4 of Section 21 160  
Township 15 South, Range 36 East  
Lea County, New Mexico

*40 acres*

*1.25  
128*

Dear Ms. Bennett,

According to our title research you own an undivided 1/128, or 1.25 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the NW/4 SE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

*160*

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

*from cont. land man*

Tim Lilley

EXHIBIT

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# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

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March 6, 2008

The Blanco Co.  
P.O. Box 1310  
Ruidoso, NM 88355

Re: Oil and Gas Lease  
SE/4 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Sir or Madam,

According to our title research you own an undivided 1/64, or 2.5 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the NW/4 SE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

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March 6, 2008

Frankie Caudill

Re: Oil and Gas Lease  
SE/4 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Ms. Caudill,

According to our title research you own an undivided 3/64, or 7.5 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the NW/4 SE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

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## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

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March 6, 2008

Bruce Crockett

Re: Oil and Gas Lease  
N/2 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Crockett

According to our title research you own an undivided 1/256, or 1.25 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

Shaw Interests, Inc.  
OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

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March 6, 2008

Ruth Tandy Hoover  
48 Main Street  
Gorham, ME 04038

Re: Oil and Gas Lease  
N/2 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Ms. Hoover,

According to our title research you own an undivided 1/144, or 2.2222 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

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March 6, 2007

Chris Johnson

Re: Oil and Gas Lease  
N/2 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Johnson,

According to our title research you own an undivided 1/216, or 1.48148 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

Enclosed is a detailed AFE reflecting estimated well costs.

If you wish to participate and pay your proportionate share of well costs, please execute the AFE and return to the undersigned as soon as possible. Otherwise, in lieu of being subject to a compulsory pooling, you have the option to lease your minerals at the terms proposed above.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

March 7, 2008

Nugent Family Operating Company, L.P.  
660 Preston Forest Center, Ste. 520  
Dallas, TX 75230

Re: Well Proposal  
SW/4NE/4 & NW/4SE/4 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Nugent,

According to our title research, the Nugent Family Operating Company, L.P. owns an undivided 1/64 interest in the SW/4NE/4 of Section 21, T15S-R36E, N.M.P.M. Enclosed is an AFE and a plat of the proposed proration unit for the Caudill South 21 Fee # 3. If you choose to participate in the drilling of the well, your dry hole costs will be \$19,421.88 and your after casing point costs will be \$7,972.66, bringing your total cost of drilling and completing the well to \$27,394.54. If you wish to participate, please sign and return the enclosed AFE to the above address.

We have also enclosed an Oil and Gas Lease for your review if you choose not to participate and want to lease your interest. If you choose to lease your interest, the terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty.

If you choose to lease your interest, please sign the lease in the presence of a Notary Public and thereafter return the lease along with the completed W-9 form to the above address. Upon receipt, we will process the lease and mail you a check in the amount of \$93.75 within thirty (30) days.

Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

$\frac{10}{5} \frac{1}{5}$

Tim Lilley

$\frac{1}{5} \frac{1}{3}$

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

March 6, 2008

Randall Pettigrew  
14125 Desert Willow  
El Paso, TX 79938

Re: Oil and Gas Lease  
N/2 NW/4 & NE/4 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Pettigrew,

According to our title research you own an undivided 1/1600, or .2 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 flat rate bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

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Please do not hesitate to contact us with any questions. We look forward to your response.

Sincerely,

SHAW INTERESTS

Tim Lilley

# Shaw Interests, Inc.

OIL & GAS PROPERTIES

MIDLAND, TX 79701

310 W. Wall St. Ste. 305

(432) 685-1404

March 6, 2008

Margaret Tandy Rice  
450 Gladys Rd., #57  
Colfax, CA 95713

Re: Oil and Gas Lease  
N/2 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Ms. Rice,

According to our title research you own an undivided 1/144, or 2.2222 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal Wolfcamp test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

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Sincerely,

SHAW INTERESTS

Tim Lilley

# Shaw Interests, Inc.

## OIL & GAS PROPERTIES

310 W. Wall St. Ste. 305

MIDLAND, TX 79701

(432) 685-1404

March 6, 2007

Fred T. Schooler

Re: Oil and Gas Lease  
N/2 of Section 21  
Township 15 South, Range 36 East  
Lea County, New Mexico

Dear Mr. Schooler,

According to our title research you own an undivided 1/144, or 2.2222 net mineral acres under the above described lands. Enclosed is an Oil and Gas Lease for your review. The terms of this lease are a \$150.00 an acre bonus consideration, a three (3) year primary term and a one-fifth (1/5) royalty. Please be advised that our client, Cimarex Energy Co., proposes to drill a horizontal test located in the SW/4 NE/4 of Section 21, Township 15 South, Range 36 East, Lea County, New Mexico.

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Sincerely,

SHAW INTERESTS

Tim Lilley



**AUTHORIZATION FOR EXPENDITURE**

COMPANY ENTITY <b>Cimarex Energy Co.</b>				DATE PREPARED <b>December 28, 2007</b>	
REGION <b>Permian</b>	WELL NAME <b>Caudill South 21 Fee</b>	WELL NO. <b>3H</b>	PROSPECT OR FIELD NAME <b>Star-Denton</b>	PROPERTY NUMBER	DRILLING AFE NO. <b>257098</b>
LOCATION <b>SHL 2000' FSL &amp; 2200' FEL BHL 1700' FNL &amp; 2200' FEL Sec 21, T15S, R36E</b>			COUNTY <b>Lea</b>	STATE <b>New Mexico</b>	TYPE WELL OIL <input checked="" type="checkbox"/> EXPL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> PROD <input type="checkbox"/>
ORIGINAL ESTIMATE	<input checked="" type="checkbox"/>	EST. START DATE	EST. COMP. DATE	FORMATION <b>Wolfcamp</b>	EST. TD <b>10900 TVD</b>
REVISED ESTIMATE	<input type="checkbox"/>				<b>12,360' MD</b>
SUPPLEMENTAL ESTIMATE	<input type="checkbox"/>				

**PROJECT DESCRIPTION:**  
Drill and complete a horizontal wolfcamp well.

<u>INTANGIBLES</u>	<u>DRY HOLE COST</u>	<u>AFTER CASING POINT</u>	<u>COMPLETED WELL COST</u>
Intangible Drilling Costs	\$2,201,000		\$2,201,000
Intangible Completion Costs		586,000	586,000
<b>TOTAL INTANGIBLE COSTS</b>	<b>2,201,000</b>	<b>586,000</b>	<b>2,787,000</b>
<u>TANGIBLES</u>			
Well Equipment	135,000	500,500	635,500
Lease Equipment		84,000	84,000
<b>TOTAL TANGIBLE WELL COST</b>	<b>135,000</b>	<b>584,500</b>	<b>719,500</b>
PLUG AND ABANDON COST	150,000	(150,000)	
<b>TOTAL WELL COST:</b>	<b>\$2,486,000</b>	<b>\$1,020,500</b>	<b>\$3,506,500</b>

**Comments on Well Costs:**

1. All tubulars, well or lease equipment is priced by COPAS and CEPS guidelines using the Historic Price Multiplier.

**WELL CONTROL INSURANCE:**

Unless otherwise indicated below, you, as a non-operating working interest owner, agree to be covered by Operator's well control insurance procured by Operator so long as Operator conducts operations hereunder and to pay your prorated share of the premiums therefore. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance acceptable to Operator, as to form and limits, at the time this AFE is returned, if available, but in no event later than commencement of drilling operations. You agree that failure to provide the certificate of insurance, as provided herein, will result in your being covered by insurance procured by Operator.

\_\_\_\_\_ I elect to purchase my own well control insurance policy.

Well control insurance procured by Operator, provides, among other terms, for \$20,000,000 (100% W.I.) of Combined Single Limit coverage for well control and related redrilling and clean-up/pollution expense covering drilling (through completion) with a \$1,000,000 (100% W.I.) deductible.

**Comments on AFE**

The above costs are estimates only and anticipate trouble free operations without any foreseeable change in plans. The actual costs may exceed the estimated costs without affecting the authorization for expenditure herein granted. By approval of this AFE, the working interest owner agrees to pay its proportionate share of actual legal, curative, regulatory and well costs under term of the joint operating agreement, regulatory order or other applicable agreement covering this well.

201.13

**CIMAREX ENERGY CO. APPROVAL**

PREPARED BY Mark Audas, Sr. Drilling/Completion Engineer Permian Basin	DRILLING AND COMPLETION MANAGER Doug Park, Mgr Drilling/Completion Operations Offshore and Permian Regions	REGIONAL MANAGER Roger Alexander, Regional Manager Permian Basin
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**JOINT INTEREST APPROVAL**

COMPANY	BY	DATE
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7/23/2008 2:24 PM

**D**  
**EXHIBIT**



PROJECT COST ESTIMATE

LEASE NAME: Caudill South 21 Fee

WELL NO.:

3H

INTANGIBLES	Codes	DRY HOLE COST	Codes	AFTER CASING POINT	COMPLETED WELL COST
ROADS & LOCATION PREPARATION / RESTORATION	DIDC.100	\$100,000	DICC.100	\$2,000	\$102,000
DAMAGES	DIDC.105	\$60,000	DICC.105		\$60,000
MUD/FLUIDS DISPOSAL CHARGES	DIDC.255	\$20,000	DICC.235	\$5,000	\$25,000
DAY RATE 42 DH DAYS 4 ACP DAYS @ PER DAY	DIDC.115	\$669,000	DICC.120	\$62,000	\$731,000
MISC PREPARATION COST (mouse hole, rat hole, pads, pile clusters, misc.)	DIDC.120	\$9,000			\$9,000
BITS	DIDC.125	\$80,000	DICC.125	\$1,000	\$81,000
FUEL \$2.70 PER GALLON	DIDC.135	\$91,000	DICC.130	\$1,000	\$92,000
WATER / COMPLETION FLUIDS	DIDC.140	\$29,400	DICC.135	\$15,000	\$44,400
MUD & ADDITIVES	DIDC.145	\$58,800			\$58,800
SURFACE RENTALS	DIDC.150	\$74,000	DICC.140	\$30,000	\$104,000
DOWNHOLE RENTALS	DIDC.155	\$96,000	DICC.145	\$20,000	\$116,000
FORMATION EVALUATION (DST, Coring including evaluation, G&G SERVICES)	DIDC.160				
MUD LOGGING 30 DAYS @ \$900 PER DAY	DIDC.170	\$34,000			\$34,000
OPEN HOLE LOGGING	DIDC.180	\$75,000			\$75,000
CEMENTING & FLOAT EQUIPMENT	DIDC.185	\$70,000	DICC.155	\$30,000	\$100,000
TUBULAR INSPECTIONS	DIDC.190	\$3,000	DICC.160	\$2,000	\$5,000
CASING CREWS	DIDC.195	\$19,000	DICC.165	\$18,000	\$37,000
EXTRA LABOR, WELDING, ETC.	DIDC.200	\$25,200	DICC.170	\$5,000	\$30,200
LAND TRANSPORTATION (Trucking)	DIDC.205	\$12,600	DICC.175	\$4,000	\$16,600
SUPERVISION	DIDC.210	\$59,000	DICC.180	\$14,400	\$73,400
TRAILER HOUSE/CAMP/CATERING	DIDC.260	\$21,000	DICC.255	\$3,000	\$24,000
OTHER MISC EXPENSES	DIDC.220	\$5,000	DICC.190	\$5,000	\$10,000
OVERHEAD	DIDC.225	\$13,000	DICC.195	\$2,400	\$15,400
REMEDIAL CEMENTING	DIDC.231		DICC.215		
MOB/DEMOB	DIDC.240	\$120,000			\$120,000
DIRECTIONAL DRILLING SERVICES 12 DAYS @ 12300 PER DAY	DIDC.245	\$148,000			\$148,000
DOCK, DISPATCHER, CRANE	DIDC.250		DICC.230		
MARINE & AIR TRANSPORTATION	DIDC.275		DICC.250		
SOLIDS CONTROL	DIDC.260	\$97,000			\$97,000
WELL CONTROL EQUIP (Snubbing services)	DIDC.265	\$41,000	DICC.240	\$21,000	\$62,000
FISHING & SIDETRACK OPERATIONS	DIDC.270	\$60,000	DICC.245		\$60,000
COMPLETION RIG 8 DAYS @ 4400 PER DAY			DICC.115	\$35,200	\$35,200
COIL TUBING 1 DAYS @ 38000 PER DAY			DICC.260	\$38,000	\$38,000
COMPLETION LOGGING, PERFORATING, WL UNITS, WL SURVEYS			DICC.200	\$6,000	\$6,000
STIMULATION			DICC.210	\$200,000	\$200,000
LEGAL/REGULATORY/CURATIVE	DIDC.300	\$3,000	DICC.280		\$3,000
WELL CONTROL INSURANCE \$0.35 PER FOOT	DIDC.285	\$4,000			\$4,000
CONTINGENCY 5% OF DRILLING INTANGIBLES	DIDC.435	\$105,000	DICC.220	\$26,000	\$131,000
CONSTRUCTION FOR WELL EQUIPMENT			DWEA.110	\$1,000	\$1,000
CONSTRUCTION FOR LEASE EQUIPMENT			DLEQ.110	\$39,000	\$39,000
CONSTRUCTION FOR SALES PL			DICC.265		
<b>TOTAL INTANGIBLE COST</b>		<b>\$2,201,000</b>		<b>\$586,000</b>	<b>\$2,787,000</b>
<b>TANGIBLE - WELL EQUIPMENT</b>					
CASING	SIZE	FEET	\$/FOOT		
DRIVE PIPE	20"	40	100.00	DWEB.150	4,000
CONDUCTOR PIPE				DWEB.130	
WATER STRING				DWEB.135	
SURFACE CASING	13-3/8"	600	44.00	DWEB.140	26,000
INTERMEDIATE CASING	8-5/8"	4,500	20.00	DWEB.145	90,000
DRILLING LINER	7"			DWEB.145	
DRILLING LINER				DWEB.145	
PRODUCTION CASING OR LINER	5 1/2"	9,800	17.80	DWEA.100	174,000
PRODUCTION TIE-BACK				DWEA.100	
TUBING	2 7/8"	12,400	6.50	DWEA.105	81,000
N/C WELL EQUIPMENT				DWEA.115	\$9,000
WELLHEAD, TREE, CHOKES				DWEB.115	15,000
LINER HANGER, ISOLATION PACKER				DWEB.100	
PACKER, NIPPLES				DWEA.125	\$82,000
PUMPING UNIT, ENGINE				DWEA.130	
LIFT EQUIPMENT (BHP, Rods, Anchors)				DLEQ.100	\$98,000
<b>TANGIBLE - LEASE EQUIPMENT</b>				DLEQ.105	\$24,500
N/C LEASE EQUIPMENT				DLEQ.115	\$44,000
TANKS, TANKS STEPS, STAIRS				DLEQ.120	\$21,000
BATTERY (Heater Treater, Separator, Gas Treating Equipment)				DLEQ.125	\$18,000
FLOW LINES (Line Pipe from wellhead to central facility)				DLEQ.130	\$1,000
OFFSHORE PRODUCTION STRUCTURE FOR FACILITIES				DWEA.135	
PIPELINES TO SALES				DWEA.140	
<b>TOTAL TANGIBLES</b>		<b>\$135,000</b>		<b>\$584,500</b>	<b>\$719,500</b>
P&A COSTS	DIDC.295	150,000	DICC.275	(150,000)	
<b>TOTAL COST</b>		<b>\$2,486,000</b>		<b>\$1,020,500</b>	<b>\$3,506,500</b>



# DRILLING PROGNOSIS

07-Jan-08

Well: Caudill South 21 Fee #3H  
 Location: Sec 21, T15S-R36E  
 County, State: Lea, NM  
 Surface Location: 2000' FSL & 2200' FEL  
 Bottomhole Loc: 1700' FNL & 2200' FEL  
 E-Mail:  
 Wellhead:

Co. Well ID:  
 AFE No.:  
 API No.:  
 Lse Serial #:  
 Field: Star/ Denton  
 Objective: Wolfcamp  
 TVD/MD: MD Vert 10,900'/MD Horizontal 12,410'/TVD Horizontal 10,671'  
 Cementing:  
 Mud: MI  
 Motors: Black Viper - Randall Taylor - 432-561-8801  
 OH Logs: No E-Logs; MWD-GR thru lateral  
 Rig:  
 Offset Wells:

Xmas Tree  
 Tubing:  
 Superintendent: Dee Smith  
 Engineer: Mark Audas

Hole Size	Formation Tops	Other	Logs	Bit IADC	Cement	Mud Weight
17 1/2'	16" Conductor @ +60' GL				20 bbl FW spacer Lead: 280 sx Light Premium plus w/0.125 lb/sk Poly-E-Flake + 1% CaCl Tail: 220 sk Premium Plus + 2% CaCl TOC @ surface	8.5 - 8.8 ppg FW
11"	13 3/8" 48 ppt, H40, STC @ 500' Rustler @ 1997'				10 bbl FW spacer Lead: 702 sx Interfill C + 125 lb/sk Poly-E-Flake 2.45/3/sk Tail: 200 sks Premium Plus + 1% CaCl 1.33 lb/sk TOC @ surface	10 ppg brine
7 7/8"	8 5/8" 32 ppt, J/K55, LTC @ 4500'					
	Glorieta @ 6637' Blinebry @ 6867' Tubb @ 7456' Drnkard @ 7597' Abo @ 8513' Wolfcamp @ 9681' Wolfcamp B @ 10030' Wolfcamp C @ 10409'		MWD-GR thru lateral		STAGE 1 Spacer: 10 ppg Super Flush 101.12 bbls Lead: 412 sx Interfill H + additives 11.9 ppg 2.45 c/sk Tail: 253 sx Super H + 5% Halaad-344 + 4% CFR-3 + 1lb/misk salt + 5 lb/sk Gilsont + .125 lb/sk Poly/Flake + 3.5% HR-7 sks 13.0 ppg 1.67 c/sk TOC 4300' Tail @ 9000'	9.95 Brine 2%KCL in lateral
	Wolfcamp C Pay @ 10,665'					
	4-3/4" hole					
	Run three (3) stage assembly on 2 7/8", 6.50 ppt, N/L80 EUE 8rd tubing (1500' Vert sec)					
	Wolfcamp E 10798'					
	5 1/2" 17.0 ppt, P110, LTC @ 10,900'					

**NOTES:**

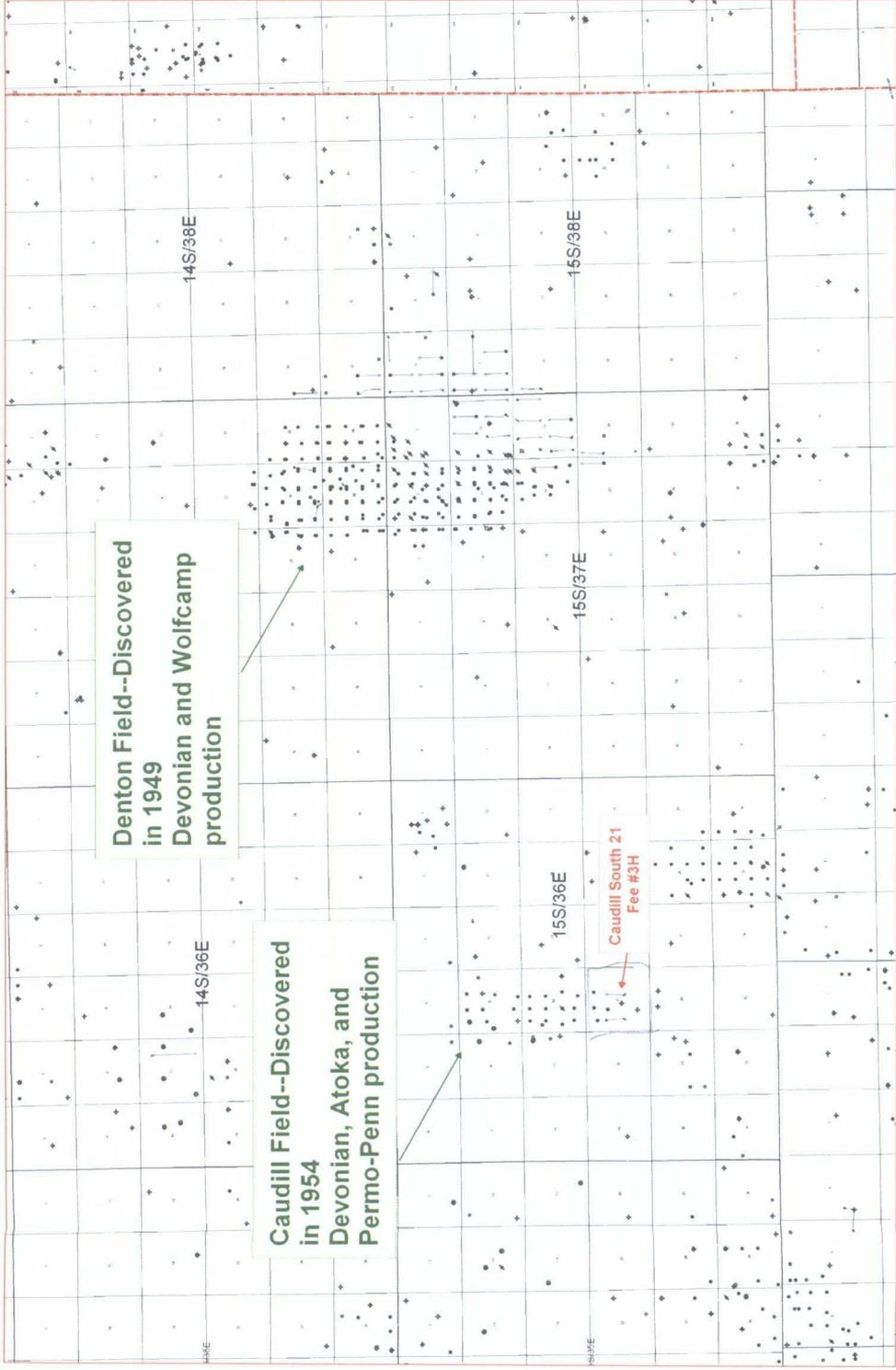
Install rattaing head on 13-3/8" Then after setting 8-5/8" in slips and installing the csg spool, NU BOP (5M) w/ rotating head and test BOP to 5M w/ test unit. Test casing.  
 Cement volumes for surface csg include a 100% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.  
 Cement volumes for intermediate csg include a 70% excess in the open hole section. If drilling conditions deem necessary, fluid caliper hole and adjust volumes.  
 Cement volumes for production csg include a 25% excess in the open hole section. Adjust volumes after caliper + 25% excess.

ALL INVOICES ARE TO SHOW CIMAREX ENERGY AS OPERATOR AND USE CIMAREX ACCOUNTING CODES.

6000  
600

Case 14153

<b>Cimarex Energy Co.</b>	
Caudill and Denton Fields Lee Co. NM	
<b>Base Map</b>	
Author	Date
Editor	Scale
1:48000	1" = 4000'



0 2000 4000 6000 8000 10000 12000 ft  
1:48000  
1 inch = 4000 feet

