ELECTION TO PARTICIPATE
Hayduke 34-3 Federal Com 10H

_____ Partnership Properties Company elects **TO** participate in the proposed Hayduke 34-3 Federal Com 10H

_____ Partnership Properties Company elects **NOT** to participate in the proposed Hayduke 34-3 Federal Com 10H

Dated this _____ day of _____, 2019.

Signature: _____

Title: _____

If your election above is TO participate in the proposed Hayduke 34-3 Federal Com 10H well, then:

_____ Partnership Properties Company elects **TO** be covered by well control insurance procured by Cimarex Energy Co.

_____ Partnership Properties Company elects **NOT** to be covered by well control insurance procured by Cimarex Energy Co. and agrees to provide Cimarex Energy Co. with a certificate of insurance prior to commencement of drilling operations **or** be deemed to have elected to be covered by well control insurance procured by Cimarex Energy Co.

CIMAREX Authorization For Expenditure Drilling AFE # 26621008

Company Entity

Date Prepared
4/23/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	HAYDUKE 34-3 FEDERAL COM 8H	Carlsbad Bone Spring Prospect	300001-135.01	26621008

County, State	Location	Estimated Spud	Estimated Completion
Eddy, NM	SHL: W/2 of Section 34, Township 25 South, Range 26 East, Eddy County, NM BHL: W/2 of Section 3, Township 26 South, Range 26 East, Eddy County, NM	1/1/2021	2/1/2021

	Formation	Well Type	Ttl Measured Depth	Ttl Vetical Depth
X New Supplement Revision		DEV	18,250	8,050

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400' set surface casing. Drill to 1876' set intermediate casing. Drill to 6823' (KOP). Drill curve at 12°/100' initial build rate to +/- 90 degrees and 7300' TVD and drill a +/- 9460' long lateral in the Bone Spring formation. Run and cement production casing. Stage frac in 48 stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	$2,104,400		$2,104,400
Completion Costs		$6,295,360	$6,295,360
Total Intangible Cost	**$2,104,400**	**$6,295,360**	**$8,399,760**

Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	$83,000	$553,000	$636,000
Lease Equipment		$161,500	$161,500
Total Tangible Cost	**$83,000**	**$714,500**	**$797,500**

Total Well Cost	**$2,187,400**	**$7,009,860**	**$9,197,260**

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.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

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.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement. 4/23/2019

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
Description	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	70,000			STIM.100	5,000	CON.100	8,000	PCOM.100	28,000	111,000
Damages	DIDC.105	10,000					CON.105	2,000			12,000
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	53,000			PCOM.255	45,000	298,000
Day Rate	DIDC.115	413,400	DICC.120	124,020							537,420
Misc Preparation	DIDC.120	35,000									35,000
Bits	DIDC.125	65,000	DICC.125	0	STIM.125	0			PCOM.125	0	65,000
Fuel	DIDC.135	74,000	DICC.130	0					PCOM.130	0	74,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	3,000	DICC.135	0	STIM.135	38,000			PCOM.135	0	41,000
Mud & Additives	DIDC.145	225,000									225,000
Surface Rentals	DIDC.150	86,000	DICC.140	0	STIM.140	189,000	CON.140	4,000	PCOM.140	30,900	309,900
Downhole Rentals	DIDC.155	74,000			STIM.145	0			PCOM.145	0	74,000
Flowback Labor					STIM.141	0			PCOM.141	13,440	13,440
Automation Labor							CON.150	25,000	PCOM.150	0	25,000
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0					0
Mud Logging	DIDC.170	22,000									22,000
Open Hole Logging	DIDC.180	0									0
Cementing & Float Equipment	DIDC.185	85,000	DICC.155	150,000							235,000
Tubular Inspections	DIDC.190	25,000	DICC.160	5,000	STIM.160	2,000			PCOM.160	0	32,000
Casing Crews	DIDC.195	12,000	DICC.165	20,000	STIM.165	0					32,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	90,000	PCOM.170	0	113,000
Trucking/Transportation	DIDC.205	15,000	DICC.175	15,000	STIM.175	2,000	CON.175	6,500	PCOM.175	0	38,500
Supervision	DIDC.210	80,000	DICC.180	18,000	STIM.180	74,000	CON.180	5,000	PCOM.180	0	177,000
Trailer House/Camp/Catering	DIDC.280	37,000	DICC.255	7,000	STIM.280	42,000					86,000
Other Misc Expenses	DIDC.220	3,000	DICC.190	0	STIM.190	145,000	CON.190	20,000	PCOM.190	0	168,000
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
Remedial Cementing	DIDC.231	0			STIM.215	0			PCOM.215	0	0
MOB/DEMOB	DIDC.240	75,000									75,000
Directional Drilling Services	DIDC.245	201,000									201,000
Solids Control	DIDC.260	74,000									74,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	0	STIM.240	81,000			PCOM.240	0	155,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0			PCOM.245	0	0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	393,000			PCOM.260	0	393,000
Completion Logging/Perforating/Wireline					STIM.200	410,000			PCOM.200	0	410,000
Composite Plugs					STIM.390	108,000			PCOM.390	0	108,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,926,000			PCOM.210	0	2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	702,000					702,000
Cimarex Owned Frac/Rental Equipment					STIM.305	42,000			PCOM.305	0	42,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	6,000									6,000
Major Construction Overhead							CON.305	13,500			13,500
Real Time Operations Center	DIDC.560	0			STIM.560	0					0
FL/GL - Labor							CON.500	94,000			94,000
FL/GL - Supervision							CON.505	7,000			7,000
Survey							CON.515	0			0
SWD/Other - Labor							CON.600	0			0
SWD/OTHER - SUPERVISION							CON.605	0			0
Contingency	DIDC.435	100,000	DICC.220	17,000	STIM.220	262,000	CON.220	30,000	PCOM.220	0	409,000
Contingency							CON.221	14,000			14,000
P&A Costs	DIDC.295	0	DICC.275	0							0
Total Intangible Cost		2,104,400		364,020		5,495,000		319,000		117,340	8,399,760
Drive Pipe	DWEB.150	0									0
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	0									0
Surface Casing	DWEB.140	14,000									14,000
Intermediate Casing 1	DWEB.145	49,000									49,000
Intermediate Casing 2	DWEB.155	0									0
Drilling Liner	DWEB.160	0									0
Production Casing or Liner			DWEA.100	326,000							326,000
Production Tie-Back			DWEA.165	0	STIMT.101	0					0
Tubing					STIMT.105	48,000			PCOMT.105	0	48,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	20,000	STIMT.120	25,000			PCOMT.120	0	65,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	15,000			PCOMT.400	0	15,000
Pumping Unit, Engine					STIMT.405	0			PCOMT.405	0	0
Downhole Lift Equipment					STIMT.410	60,000			PCOMT.410	0	60,000
Surface Equipment									PCOMT.420	59,000	59,000
Well Automation Materials									PCOMT.455	0	0
Total Tangible - Well Equipment Cost		83,000		346,000		148,000				59,000	636,000
N/C Lease Equipment							CONT.400	57,000			57,000
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	0			0
Secondary Containments							CONT.415	14,500			14,500
Overhead Power Distribution							CONT.420	0			0
Facility Electrical							CONT.425	22,500			22,500
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	3,500			3,500
Facility Line Pipe							CONT.450	6,000			6,000
Lease Automation Materials							CONT.455	23,000			23,000
FL/GL - Materials							CONT.550	14,500			14,500
FL/GL - Line Pipe							CONT.555	20,500			20,500
SWD/Other - Materials							CONT.650	0			0
SWD/OTHER - LINE PIPE							CONT.655	0			0
Total Tangible - Lease Equipment Cost								161,500			161,500
Total Estimated Cost		**2,187,400**		**710,020**		**5,643,000**		**480,500**		**176,340**	**9,197,260**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

	BCP - Drilling			ACP - Drilling			Comp/Stim		
Description	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		70,000				STIM.100		5,000
Damages	DIDC.105		10,000						
Mud/Fluids Dispesal	DIDC.255		200,000				STIM.255		53,000
Day Rate	DIDC.115	14 days at $26,000/day	413,400	DICC.120	5 days at $26,000/day	124,020			
Misc Preparation	DIDC.120		35,000						
Bits	DIDC.125		65,000	DICC.125		0	STIM.125		0
Fuel	DIDC.135	1,300 gal/day at $3.00/gal	74,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140		3,000	DICC.135		0	STIM.135		38,000
Mud & Additives	DIDC.145		225,000						
Surface Rentals	DIDC.150	Per Day (BCP)/day	86,000	DICC.140		0	STIM.140		189,000
Downhole Rentals	DIDC.155		74,000				STIM.145		0
Flowback Labor							STIM.141		0
Automation Labor									
Formation Evaluation (DST, Coring, etc.)	DIDC.160		0				STIM.150		0
Mud Logging	DIDC.170	14 days at $1,200/day	22,000						
Open Hole Logging	DIDC.180		0						
Cementing & Float Equipment	DIDC.185		85,000	DICC.155		150,000			
Tubular Inspections	DIDC.190		25,000	DICC.160		5,000	STIM.160		2,000
Casing Crews	DIDC.195		12,000	DICC.165		20,000	STIM.165		0
Mechanical Labor	DIDC.200		20,000	DICC.170		3,000	STIM.170		0
Trucking/Transportation	DIDC.205		15,000	DICC.175		15,000	STIM.175		2,000
Supervision	DIDC.210		80,000	DICC.180		18,000	STIM.180		74,000
Trailer House/Camp/Catering	DIDC.280		37,000	DICC.255		7,000	STIM.280		42,000
Other Misc Expenses	DIDC.220		3,000	DICC.190		0	STIM.190		145,000
Overhead	DIDC.225		10,000	DICC.195		5,000			
Remedial Cementing	DIDC.231		0				STIM.215		0
MOB/DEMOB	DIDC.240		75,000						
Directional Drilling Services	DIDC.245		201,000						
Solids Control	DIDC.260		74,000						
Well Control Equip (Snubbing Services)	DIDC.265		74,000	DICC.240		0	STIM.240		81,000
Fishing & Sidetrack Services	DIDC.270		0	DICC.245		0	STIM.245		0
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		393,000
Completion Logging/Perforating/Wireline							STIM.200		410,000
Composite Plugs							STIM.390		108,000
Stimulation							STIM.210		2,926,000
Stimulation Water/Water Transfer/Water							STIM.395		702,000
Cimarex Owned Frac/Rental Equipment							STIM.305		42,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285	$0.35/ft	6,000						
Major Construction Overhead									
Real Time Operations Center	DIDC.560		0				STIM.560		0
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION									
Contingency	DIDC.435	500 % of Drilling Intangibles	100,000	DICC.220		17,000	STIM.220		262,000
Contingency									
P&A Costs	DIDC.295		0	DICC.275		0			
Total Intangible Cost			2,104,400			364,020			5,495,000
Drive Pipe	DWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		0						
Surface Casing	DWEB.140	13 3/8" - 400ft at $35.00/ft	14,000						
Intermediate Casing 1	DWEB.145	9 5/8" - 1,875ft at $26.00/ft	49,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner				DWEA.100	5 1/2" - 17,139ft at $19.00/ft	326,000			
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing							STIMT.105	2 7/8" - 6,920ft at $7.00/ft	48,000
Wellhead, Tree, Chokes	DWEB.115		20,000	DWEA.120		20,000	STIMT.120		25,000
Liner Hanger, Isolation Packer	DWEB.100		0	DWEA.125		0			
Packer, Nipples							STIMT.400		15,000
Pumping Unit, Engine							STIMT.405		0
Downhole Lift Equipment							STIMT.410		60,000
Surface Equipment									
Well Automation Materials									
Total Tangible - Well Equipment Cost			83,000			346,000			148,000
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Line Pipe									
SWD/Other - Materials									
SWD/OTHER - LINE PIPE									
Total Tangible - Lease Equipment Cost									
Total Estimated Cost			**2,187,400**			**710,020**			**5,643,000**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

		Production Equip			Post Completion		Total
Description	Codes		Amount	Codes		Amount	Cost
Roads & Location	CON.100		8,000	PCOM.100	Pad/Road Clean Up	28,000	111,000
Damages	CON.105		2,000				12,000
Mud/Fluids Disposal				PCOM.255	3,000 BWPD for 60 days @ $0.25/bbl	45,000	298,000
Day Rate							537,420
Misc Preparation							35,000
Bits				PCOM.125		0	65,000
Fuel				PCOM.130		0	74,000
Water for Drilling Rig (Not Frac Water)				PCOM.135		0	41,000
Mud & Additives							225,000
Surface Rentals	CON.140		4,000	PCOM.140	$1,030/d for Production Target of 30 Days	30,900	309,900
Downhole Rentals				PCOM.145		0	74,000
Flowback Labor				PCOM.141	$960/d for Production Target of 14 Day	13,440	13,440
Automation Labor	CON.150		25,000	PCOM.150		0	25,000
Formation Evaluation (DST, Coring, etc.)							0
Mud Logging							22,000
Open Hole Logging							0
Cementing & Float Equipment							235,000
Tubular Inspections				PCOM.160		0	32,000
Casing Crews							32,000
Mechanical Labor	CON.170		90,000	PCOM.170		0	113,000
Trucking/Transportation	CON.175		6,500	PCOM.175		0	38,500
Supervision	CON.180		5,000	PCOM.180		0	177,000
Trailer House/Camp/Catering							86,000
Other Misc Expenses	CON.190		20,000	PCOM.190		0	168,000
Overhead							15,000
Remedial Cementing				PCOM.215		0	0
MOB/DEMOB							75,000
Directional Drilling Services							201,000
Solids Control							74,000
Well Control Equip (Snubbing Services)				PCOM.240		0	155,000
Fishing & Sidetrack Services				PCOM.245		0	0
Completion Rig				PCOM.115		0	21,000
Coil Tubing Services				PCOM.260		0	393,000
Completion Logging/Perforating/Wireline				PCOM.200		0	410,000
Composite Plugs				PCOM.390		0	108,000
Stimulation Pumping/Chemicals/Additives/Sand				PCOM.210		0	2,926,000
Stimulation Water/Water Transfer/Water							702,000
Cimarex Owned Frac/Rental Equipment				PCOM.305		0	42,000
Legal/Regulatory/Curative	CON.300		0				10,000
Well Control Insurance							6,000
Major Construction Overhead	CON.305		13,500				13,500
Real Time Operations Center							0
FL/GL - Labor	CON.500		94,000				94,000
FL/GL - Supervision	CON.505		7,000				7,000
Survey	CON.515		0				0
SWD/Other - Labor	CON.600		0				0
SWD/OTHER - SUPERVISION	CON.605		0				0
Contingency	CON.220		30,000	PCOM.220		0	409,000
Contingency	CON.221		14,000				14,000
P&A Costs							0
Total Intangible Cost			319,000			117,340	8,399,760
Drive Pipe							0
Conductor Pipe							0
Water String							0
Surface Casing							14,000
Intermediate Casing 1							49,000
Intermediate Casing 2							0
Drilling Liner							0
Production Casing or Liner							326,000
Production Tie-Back							0
Tubing				PCOMT.105		0	48,000
Wellhead, Tree, Chokes				PCOMT.120		0	65,000
Liner Hanger, Isolation Packer							0
Packer, Nipples				PCOMT.400		0	15,000
Pumping Unit, Engine				PCOMT.405		0	0
Downhole Lift Equipment				PCOMT.410		0	60,000
Surface Equipment				PCOMT.420	XEC Owned Sand Separator	59,000	59,000
Well Automation Materials				PCOMT.455		0	0
Total Tangible - Well Equipment Cost						59,000	636,000
N/C Lease Equipment	CONT.400		57,000				57,000
Tanks, Tanks Steps, Stairs	CONT.405		0				0
Battery Equipment	CONT.410		0				0
Secondary Containments	CONT.415		14,500				14,500
Overhead Power Distribution	CONT.420		0				0
Facility Electrical	CONT.425		22,500				22,500
Telecommunication Equipment	CONT.426		0				0
Meters and Metering Equipment	CONT.445		3,500				3,500
Facility Line Pipe	CONT.450		6,000				6,000
Lease Automation Materials	CONT.455		23,000				23,000
FL/GL - Materials	CONT.550		14,500				14,500
FL/GL - Line Pipe	CONT.555		20,500				20,500
SWD/Other - Materials	CONT.650		0				0
SWD/OTHER - LINE PIPE	CONT.655		0				0
Total Tangible - Lease Equipment Cost			161,500				161,500
Total Estimated Cost			**480,500**			**176,340**	**9,197,260**

CIMAREX Authorization For Expenditure Drilling AFE # 26621008

Company Entity

Date Prepared
4/23/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	HAYDUKE 34-3 FEDERAL COM 8H	Carlsbad Bone Spring Prospect	300001-135.01	26621008

County, State	Location	Estimated Spud	Estimated Completion
Eddy, NM	SHL: W/2 of Section 34, Township 25 South, Range 26 East, Eddy County, NM BHL: W/2 of Section 3, Township 26 South, Range 26 East, Eddy County, NM	1/1/2021	2/1/2021

	Formation	Well Type	Ttl Measured Depth	Ttl Vetical Depth
X New Supplement Revision		DEV	18,250	8,050

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Drilling Drill and complete a horizontal test. Drill to 400' set surface casing. Drill to 1876' set intermediate casing. Drill to 6823' (KOP). Drill curve at 12°/100' initial build rate to +/- 90 degrees and 7300' TVD and drill a +/- 9460' long lateral in the Bone Spring formation. Run and cement production casing. Stage frac in 48 stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	$2,104,400		$2,104,400
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Comments On Well Costs

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I elect to purchase my own well control insurance policy.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

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.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement.

4/23/2019

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

Description	BCP - Drilling Codes	BCP - Drilling Amount	ACP - Drilling Codes	ACP - Drilling Amount	Comp/Stim Codes	Comp/Stim Amount	Production Equip Codes	Production Equip Amount	Post Completion Codes	Post Completion Amount	Total Cost
Roads & Location	DIDC.100	70,000			STIM.100	5,000	CON.100	8,000	PCOM.100	28,000	111,000
Damages	DIDC.105	10,000					CON.105	2,000			12,000
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	53,000			PCOM.255	45,000	298,000
Day Rate	DIDC.115	413,400	DICC.120	124,020							537,420
Misc Preparation	DIDC.120	35,000									35,000
Bits	DIDC.125	65,000	DICC.125	0	STIM.125	0			PCOM.125	0	65,000
Fuel	DIDC.135	74,000	DICC.130	0					PCOM.130	0	74,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	3,000	DICC.135	0	STIM.135	38,000			PCOM.135	0	41,000
Mud & Additives	DIDC.145	225,000									225,000
Surface Rentals	DIDC.150	86,000	DICC.140	0	STIM.140	189,000	CON.140	4,000	PCOM.140	30,900	309,900
Downhole Rentals	DIDC.155	74,000			STIM.145	0			PCOM.145	0	74,000
Flowback Labor					STIM.141	0			PCOM.141	13,440	13,440
Automation Labor							CON.150	25,000	PCOM.150	0	25,000
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0					0
Mud Logging	DIDC.170	22,000									22,000
Open Hole Logging	DIDC.180	0									0
Cementing & Float Equipment	DIDC.185	85,000	DICC.155	150,000							235,000
Tubular Inspections	DIDC.190	25,000	DICC.160	5,000	STIM.160	2,000			PCOM.160	0	32,000
Casing Crews	DIDC.195	12,000	DICC.165	20,000	STIM.165	0					32,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	90,000	PCOM.170	0	113,000
Trucking/Transportation	DIDC.205	15,000	DICC.175	15,000	STIM.175	2,000	CON.175	6,500	PCOM.175	0	38,500
Supervision	DIDC.210	80,000	DICC.180	18,000	STIM.180	74,000	CON.180	5,000	PCOM.180	0	177,000
Trailer House/Camp/Catering	DIDC.280	37,000	DICC.255	7,000	STIM.280	42,000					86,000
Other Misc Expenses	DIDC.220	3,000	DICC.190	0	STIM.190	145,000	CON.190	20,000	PCOM.190	0	168,000
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
Remedial Cementing	DIDC.231	0			STIM.215	0			PCOM.215	0	0
MOB/DEMOB	DIDC.240	75,000									75,000
Directional Drilling Services	DIDC.245	201,000									201,000
Solids Control	DIDC.260	74,000									74,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	0	STIM.240	81,000			PCOM.240	0	155,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0			PCOM.245	0	0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	393,000			PCOM.260	0	393,000
Completion Logging/Perforating/Wireline					STIM.200	410,000			PCOM.200	0	410,000
Composite Plugs					STIM.390	108,000			PCOM.390	0	108,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,926,000			PCOM.210	0	2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	702,000					702,000
Cimarex Owned Frac/Rental Equipment					STIM.305	42,000			PCOM.305	0	42,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	6,000									6,000
Major Construction Overhead							CON.305	13,500			13,500
Real Time Operations Center	DIDC.560	0			STIM.560	0					0
FL/GL - Labor							CON.500	94,000			94,000
FL/GL - Supervision							CON.505	7,000			7,000
Survey							CON.515	0			0
SWD/Other - Labor							CON.600	0			0
SWD/OTHER - SUPERVISION							CON.605	0			0
Contingency	DIDC.435	100,000	DICC.220	17,000	STIM.220	262,000	CON.220	30,000	PCOM.220	0	409,000
Contingency							CON.221	14,000			14,000
P&A Costs	DIDC.295	0	DICC.275	0							0
Total Intangible Cost		2,104,400		364,020		5,495,000		319,000		117,340	8,399,760
Drive Pipe	DWEB.150	0									0
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	0									0
Surface Casing	DWEB.140	14,000									14,000
Intermediate Casing 1	DWEB.145	49,000									49,000
Intermediate Casing 2	DWEB.155	0									0
Drilling Liner	DWEB.160	0									0
Production Casing or Liner			DWEA.100	326,000							326,000
Production Tie-Back			DWEA.165	0	STIMT.101	0					0
Tubing					STIMT.105	48,000			PCOMT.105	0	48,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	20,000	STIMT.120	25,000			PCOMT.120	0	65,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	15,000			PCOMT.400	0	15,000
Pumping Unit, Engine					STIMT.405	0			PCOMT.405	0	0
Downhole Lift Equipment					STIMT.410	60,000			PCOMT.410	0	60,000
Surface Equipment									PCOMT.420	59,000	59,000
Well Automation Materials									PCOMT.455	0	0
Total Tangible - Well Equipment Cost		83,000		346,000		148,000				59,000	636,000
N/C Lease Equipment							CONT.400	57,000			57,000
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	0			0
Secondary Containments							CONT.415	14,500			14,500
Overhead Power Distribution							CONT.420	0			0
Facility Electrical							CONT.425	22,500			22,500
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	3,500			3,500
Facility Line Pipe							CONT.450	6,000			6,000
Lease Automation Materials							CONT.455	23,000			23,000
FL/GL - Materials							CONT.550	14,500			14,500
FL/GL - Line Pipe							CONT.555	20,500			20,500
SWD/Other - Materials							CONT.650	0			0
SWD/OTHER - LINE PIPE							CONT.655	0			0
Total Tangible - Lease Equipment Cost								161,500			161,500
Total Estimated Cost		**2,187,400**		**710,020**		**5,643,000**		**480,500**		**176,340**	**9,197,260**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

	BCP - Drilling			ACP - Drilling			Comp/Stim		
Description	Codes		Amount	Codes		Amount	Codes		Amount
Roads & Location	DIDC.100		70,000				STIM.100		5,000
Damages	DIDC.105		10,000						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		53,000
Day Rate	DIDC.115	14 days at $26,000/day	413,400	DICC.120	5 days at $26,000/day	124,020			
Misc Preparation	DIDC.120		35,000						
Bits	DIDC.125		65,000	DICC.125		0	STIM.125		0
Fuel	DIDC.135	1,300 gal/day at $3.00/gal	74,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140		3,000	DICC.135		0	STIM.135		38,000
Mud & Additives	DIDC.145		225,000						
Surface Rentals	DIDC.150	Per Day (BCP)/day	86,000	DICC.140		0	STIM.140		189,000
Downhole Rentals	DIDC.155		74,000				STIM.145		0
Flowback Labor							STIM.141		0
Automation Labor									
Formation Evaluation (DST, Coring, etc.)	DIDC.160		0				STIM.150		0
Mud Logging	DIDC.170	14 days at $1,200/day	22,000						
Open Hole Logging	DIDC.180		0						
Cementing & Float Equipment	DIDC.185		85,000	DICC.155		150,000			
Tubular Inspections	DIDC.190		25,000	DICC.160		5,000	STIM.160		2,000
Casing Crews	DIDC.195		12,000	DICC.165		20,000	STIM.165		0
Mechanical Labor	DIDC.200		20,000	DICC.170		3,000	STIM.170		0
Trucking/Transportation	DIDC.205		15,000	DICC.175		15,000	STIM.175		2,000
Supervision	DIDC.210		80,000	DICC.180		18,000	STIM.180		74,000
Trailer House/Camp/Catering	DIDC.280		37,000	DICC.255		7,000	STIM.280		42,000
Other Misc Expenses	DIDC.220		3,000	DICC.190		0	STIM.190		145,000
Overhead	DIDC.225		10,000	DICC.195		5,000			
Remedial Cementing	DIDC.231		0				STIM.215		0
MOB/DEMOB	DIDC.240		75,000						
Directional Drilling Services	DIDC.245		201,000						
Solids Control	DIDC.260		74,000						
Well Control Equip (Snubbing Services)	DIDC.265		74,000	DICC.240		0	STIM.240		81,000
Fishing & Sidetrack Services	DIDC.270		0	DICC.245		0	STIM.245		0
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		393,000
Completion Logging/Perforating/Wireline							STIM.200		410,000
Composite Plugs							STIM.390		108,000
Stimulation							STIM.210		2,926,000
Stimulation Water/Water Transfer/Water							STIM.395		702,000
Cimarex Owned Frac/Rental Equipment							STIM.305		42,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285	$0.35/ft	6,000						
Major Construction Overhead									
Real Time Operations Center	DIDC.560		0				STIM.560		0
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION									
Contingency	DIDC.435	500 % of Drilling Intangibles	100,000	DICC.220		17,000	STIM.220		262,000
Contingency									
P&A Costs	DIDC.295		0	DICC.275		0			
Total Intangible Cost			2,104,400			364,020			5,495,000
Drive Pipe	DWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		0						
Surface Casing	DWEB.140	13 3/8" - 400ft at $35.00/ft	14,000						
Intermediate Casing 1	DWEB.145	9 5/8" - 1,876ft at $26.00/ft	49,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner				DWEA.100	5 1/2" - 17,139ft at $19.00/ft	326,000			
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing							STIMT.105	2 7/8" - 6,920ft at $7.00/ft	48,000
Wellhead, Tree, Chokes	DWEB.115		20,000	DWEA.120		20,000	STIMT.120		25,000
Liner Hanger, Isolation Packer	DWEB.100		0	DWEA.125		0			
Packer, Nipples							STIMT.400		15,000
Pumping Unit, Engine							STIMT.405		0
Downhole Lift Equipment							STIMT.410		60,000
Surface Equipment									
Well Automation Materials									
Total Tangible - Well Equipment Cost			83,000			346,000			148,000
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Line Pipe									
SWD/Other - Materials									
SWD/OTHER - LINE PIPE									
Total Tangible - Lease Equipment Cost									
Total Estimated Cost			**2,187,400**			**710,020**			**5,643,000**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 8H

AFE # 26621008

		Production Equip		Post Completion		Total
Description	Codes	Amount	Codes		Amount	Cost
Roads & Location	CON.100	8,000	PCOM.100	Pad/Road Clean Up	28,000	111,000
Damages	CON.105	2,000				12,000
Mud/Fluids Disposal			PCOM.255	3,000 BWPD for 60 days @ $0.25/bbl	45,000	298,000
Day Rate						537,420
Misc Preparation						35,000
Bits			PCOM.125		0	65,000
Fuel			PCOM.130		0	74,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	41,000
Mud & Additives						225,000
Surface Rentals	CON.140	4,000	PCOM.140	$1,030/d for Production Target of 30 Days	30,900	309,900
Downhole Rentals			PCOM.145		0	74,000
Flowback Labor			PCOM.141	$960/d for Production Target of 14 Day	13,440	13,440
Automation Labor	CON.150	25,000	PCOM.150		0	25,000
Formation Evaluation (DST, Coring, etc.)						0
Mud Logging						22,000
Open Hole Logging						0
Cementing & Float Equipment						235,000
Tubular Inspections			PCOM.160		0	32,000
Casing Crews						32,000
Mechanical Labor	CON.170	90,000	PCOM.170		0	113,000
Trucking/Transportation	CON.175	6,500	PCOM.175		0	38,500
Supervision	CON.180	5,000	PCOM.180		0	177,000
Trailer House/Camp/Catering						86,000
Other Misc Expenses	CON.190	20,000	PCOM.190		0	168,000
Overhead						15,000
Remedial Cementing			PCOM.215		0	0
MOB/DEMOB						75,000
Directional Drilling Services						201,000
Solids Control						74,000
Well Control Equip (Snubbing Services)			PCOM.240		0	155,000
Fishing & Sidetrack Services			PCOM.245		0	0
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	393,000
Completion Logging/Perforating/Wireline			PCOM.200		0	410,000
Composite Plugs			PCOM.390		0	108,000
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	2,926,000
Stimulation Water/Water Transfer/Water						702,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	42,000
Legal/Regulatory/Curative	CON.300	0				10,000
Well Control Insurance						6,000
Major Construction Overhead	CON.305	13,500				13,500
Real Time Operations Center						0
FL/GL - Labor	CON.500	94,000				94,000
FL/GL - Supervision	CON.505	7,000				7,000
Survey	CON.515	0				0
SWD/Other - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605	0				0
Contingency	CON.220	30,000	PCOM.220		0	409,000
Contingency	CON.221	14,000				14,000
P&A Costs						0
Total Intangible Cost		319,000			117,340	8,399,760
Drive Pipe						0
Conductor Pipe						0
Water String						0
Surface Casing						14,000
Intermediate Casing 1						49,000
Intermediate Casing 2						0
Drilling Liner						0
Production Casing or Liner						326,000
Production Tie-Back						0
Tubing			PCOMT.105		0	48,000
Wellhead, Tree, Chokes			PCOMT.120		0	65,000
Liner Hanger, Isolation Packer						0
Packer, Nipples			PCOMT.400		0	15,000
Pumping Unit, Engine			PCOMT.405		0	0
Downhole Lift Equipment			PCOMT.410		0	60,000
Surface Equipment			PCOMT.420	XEC Owned Sand Separator	59,000	59,000
Well Automation Materials			PCOMT.455		0	0
Total Tangible - Well Equipment Cost					59,000	636,000
N/C Lease Equipment	CONT.400	57,000				57,000
Tanks, Tanks Steps, Stairs	CONT.405	0				0
Battery Equipment	CONT.410	0				0
Secondary Containments	CONT.415	14,500				14,500
Overhead Power Distribution	CONT.420	0				0
Facility Electrical	CONT.425	22,500				22,500
Telecommunication Equipment	CONT.426	0				0
Meters and Metering Equipment	CONT.445	3,500				3,500
Facility Line Pipe	CONT.450	6,000				6,000
Lease Automation Materials	CONT.455	23,000				23,000
FL/GL - Materials	CONT.550	14,500				14,500
FL/GL - Line Pipe	CONT.555	20,500				20,500
SWD/Other - Materials	CONT.650	0				0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost		161,500				161,500
Total Estimated Cost		**480,500**			**176,340**	**9,197,260**

CIMAREX Authorization For Expenditure Drilling

AFE # 26621010

Company Entity

Date Prepared
4/23/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	HAYDUKE 34-3 FEDERAL COM 10H	Carlsbad Bone Spring Prospect	300001-137.01	26621010

County, State	Location	Estimated Spud	Estimated Completion
Eddy, NM	SHL: W/2 of Section 34, Township 25 South, Range 26 East, Eddy County, NM BHL: W/2 of Section 3, Township 26 South, Range 26 East, Eddy County, NM	1/1/2021	2/1/2021

	Formation	Well Type	Ttl Measured Depth	Ttl Vetical Depth
X New Supplement Revision	Bone Spring 2 /Sd/	DEV	17,500	7,450

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400' set surface casing. Drill to 1876' set intermediate casing. Drill to 7203' (KOP). Drill curve at 12°/100' initial build rate to +/- 90 degrees and 7680' TVD and drill a +/- 9460' long lateral in the Bone Spring formation. Run and cement production casing. Stage frac in 48 stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	$2,104,400		$2,104,400
Completion Costs		$6,258,860	$6,258,860
Total Intangible Cost	**$2,104,400**	**$6,258,860**	**$8,363,260**

Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	$83,000	$563,000	$646,000
Lease Equipment		$160,000	$160,000
Total Tangible Cost	**$83,000**	**$723,000**	**$806,000**
Total Well Cost	**$2,187,400**	**$6,981,860**	**$9,169,260**

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.

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

I elect to take my gas in kind.

I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.

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.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement. 4/23/2019

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
Description	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	70,000			STIM.100	5,000	CON.100	8,000	PCOM.100	28,000	111,000
Damages	DIDC.105	10,000					CON.105	2,500			12,500
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	53,000			PCOM.255	45,000	298,000
Day Rate	DIDC.115	413,400	DICC.120	124,020							537,420
Misc Preparation	DIDC.120	35,000									35,000
Bits	DIDC.125	65,000	DICC.125	0	STIM.125	0			PCOM.125	0	65,000
Fuel	DIDC.135	74,000	DICC.130	0					PCOM.130	0	74,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	3,000	DICC.135	0	STIM.135	38,000			PCOM.135	0	41,000
Mud & Additives	DIDC.145	225,000									225,000
Surface Rentals	DIDC.150	86,000	DICC.140	0	STIM.140	189,000	CON.140	4,000	PCOM.140	30,900	309,900
Downhole Rentals	DIDC.155	74,000			STIM.145	0			PCOM.145	0	74,000
Flowback Labor					STIM.141	0			PCOM.141	13,440	13,440
Automation Labor							CON.150	25,000	PCOM.150	0	25,000
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0					0
Mud Logging	DIDC.170	22,000									22,000
Open Hole Logging	DIDC.180	0									0
Cementing & Float Equipment	DIDC.185	85,000	DICC.155	150,000							235,000
Tubular Inspections	DIDC.190	25,000	DICC.160	5,000	STIM.160	2,000			PCOM.160	0	32,000
Casing Crews	DIDC.195	12,000	DICC.165	20,000	STIM.165	0					32,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	52,000	PCOM.170	0	75,000
Trucking/Transportation	DIDC.205	15,000	DICC.175	15,000	STIM.175	2,000	CON.175	6,500	PCOM.175	0	38,500
Supervision	DIDC.210	80,000	DICC.180	18,000	STIM.180	74,000	CON.180	5,000	PCOM.180	0	177,000
Trailer House/Camp/Catering	DIDC.280	37,000	DICC.255	7,000	STIM.280	42,000					86,000
Other Misc Expenses	DIDC.220	3,000	DICC.190	0	STIM.190	145,000	CON.190	20,000	PCOM.190	0	168,000
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
Remedial Cementing	DIDC.231	0			STIM.215	0			PCOM.215	0	0
MOB/DEMOB	DIDC.240	75,000									75,000
Directional Drilling Services	DIDC.245	201,000									201,000
Solids Control	DIDC.260	74,000									74,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	0	STIM.240	81,000			PCOM.240	0	155,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0			PCOM.245	0	0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	393,000			PCOM.260	0	393,000
Completion Logging/Perforating/Wireline					STIM.200	410,000			PCOM.200	0	410,000
Composite Plugs					STIM.390	108,000			PCOM.390	0	108,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,926,000			PCOM.210	0	2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	702,000					702,000
Cimarex Owned Frac/Rental Equipment					STIM.305	42,000			PCOM.305	0	42,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	6,000									6,000
Major Construction Overhead							CON.305	12,500			12,500
Real Time Operations Center	DIDC.560	0			STIM.560	0					0
FL/GL - Labor							CON.500	99,500			99,500
FL/GL - Supervision							CON.505	7,000			7,000
Survey							CON.515	0			0
SWD/Other - Labor							CON.600	0			0
SWD/OTHER - SUPERVISION							CON.605	0			0
Contingency	DIDC.435	100,000	DICC.220	17,000	STIM.220	262,000	CON.220	25,500	PCOM.220	0	404,500
Contingency							CON.221	15,000			15,000
P&A Costs	DIDC.295	0	DICC.275	0							0
Total Intangible Cost		2,104,400		364,020		5,495,000		282,500		117,340	8,363,260
Drive Pipe	DWEB.150	0									0
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	0									0
Surface Casing	DWEB.140	14,000									14,000
Intermediate Casing 1	DWEB.145	49,000									49,000
Intermediate Casing 2	DWEB.155	0									0
Drilling Liner	DWEB.160	0									0
Production Casing or Liner			DWEA.100	333,000							333,000
Production Tie-Back			DWEA.165	0	STIMT.101	0					0
Tubing					STIMT.105	51,000			PCOMT.105	0	51,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	20,000	STIMT.120	25,000			PCOMT.120	0	65,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	15,000			PCOMT.400	0	15,000
Pumping Unit, Engine					STIMT.405	0			PCOMT.405	0	0
Downhole Lift Equipment					STIMT.410	60,000			PCOMT.410	0	60,000
Surface Equipment									PCOMT.420	59,000	59,000
Well Automation Materials									PCOMT.455	0	0
Total Tangible - Well Equipment Cost		83,000		353,000		151,000				59,000	646,000
N/C Lease Equipment							CONT.400	57,000			57,000
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	0			0
Secondary Containments							CONT.415	8,500			8,500
Overhead Power Distribution							CONT.420	0			0
Facility Electrical							CONT.425	22,500			22,500
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	3,500			3,500
Facility Line Pipe							CONT.450	6,000			6,000
Lease Automation Materials							CONT.455	23,000			23,000
FL/GL - Materials							CONT.550	14,500			14,500
FL/GL - Line Pipe							CONT.555	25,000			25,000
SWD/Other - Materials							CONT.650	0			0
SWD/OTHER - LINE PIPE							CONT.655	0			0
Total Tangible - Lease Equipment Cost								160,000			160,000
Total Estimated Cost		**2,187,400**		**717,020**		**5,646,000**		**442,500**		**176,340**	**9,169,260**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

Description	BCP - Drilling Codes		BCP - Drilling Amount	ACP - Drilling Codes		ACP - Drilling Amount	Comp/Stim Codes		Comp/Stim Amount
Roads & Location	DIDC.100		70,000				STIM.100		5,000
Damages	DIDC.105		10,000						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		53,000
Day Rate	DIDC.115	14 days at $26,000/day	413,400	DICC.120	5 days at $26,000/day	124,020			
Misc Preparation	DIDC.120		35,000						
Bits	DIDC.125		65,000	DICC.125		0	STIM.125		0
Fuel	DIDC.135	1,300 gal/day at $3.00/gal	74,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140		3,000	DICC.135		0	STIM.135		38,000
Mud & Additives	DIDC.145		225,000						
Surface Rentals	DIDC.150	Per Day (BCP)/day	86,000	DICC.140		0	STIM.140		189,000
Downhole Rentals	DIDC.155		74,000				STIM.145		0
Flowback Labor							STIM.141		0
Automation Labor									
Formation Evaluation (DST, Coring, etc.)	DIDC.160		0				STIM.150		0
Mud Logging	DIDC.170	14 days at $1,200/day	22,000						
Open Hole Logging	DIDC.180		0						
Cementing & Float Equipment	DIDC.185		85,000	DICC.155		150,000			
Tubular Inspections	DIDC.190		25,000	DICC.160		5,000	STIM.160		2,000
Casing Crews	DIDC.195		12,000	DICC.165		20,000	STIM.165		0
Mechanical Labor	DIDC.200		20,000	DICC.170		3,000	STIM.170		0
Trucking/Transportation	DIDC.205		15,000	DICC.175		15,000	STIM.175		2,000
Supervision	DIDC.210		80,000	DICC.180		18,000	STIM.180		74,000
Trailer House/Camp/Catering	DIDC.280		37,000	DICC.255		7,000	STIM.280		42,000
Other Misc Expenses	DIDC.220		3,000	DICC.190		0	STIM.190		145,000
Overhead	DIDC.225		10,000	DICC.195		5,000			
Remedial Cementing	DIDC.231		0				STIM.215		0
MOB/DEMOB	DIDC.240		75,000						
Directional Drilling Services	DIDC.245		201,000						
Solids Control	DIDC.260		74,000						
Well Control Equip (Snubbing Services)	DIDC.265		74,000	DICC.240		0	STIM.240		81,000
Fishing & Sidetrack Services	DIDC.270		0	DICC.245		0	STIM.245		0
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		393,000
Completion Logging/Perforating/Wireline							STIM.200		410,000
Composite Plugs							STIM.390		108,000
Stimulation							STIM.210		2,926,000
Stimulation Water/Water Transfer/Water							STIM.395		702,000
Cimarex Owned Frac/Rental Equipment							STIM.305		42,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285	$0.35/ft	6,000						
Major Construction Overhead									
Real Time Operations Center	DIDC.560		0				STIM.560		0
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION									
Contingency	DIDC.435	500 % of Drilling Intangibles	100,000	DICC.220		17,000	STIM.220		262,000
Contingency									
P&A Costs	DIDC.295		0	DICC.275		0			
Total Intangible Cost			2,104,400			364,020			5,495,000
Drive Pipe	DWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		0						
Surface Casing	DWEB.140	13 3/8" - 400ft at $35.00/ft	14,000						
Intermediate Casing 1	DWEB.145	9 5/8" - 1,876ft at $26.00/ft	49,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner				DWEA.100	5 1/2" - 17,519ft at $19.00/ft	333,000			
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing							STIMT.105	2 7/8" - 7,300ft at $7.00/ft	51,000
Wellhead, Tree, Chokes	DWEB.115		20,000	DWEA.120		20,000	STIMT.120		25,000
Liner Hanger, Isolation Packer	DWEB.100		0	DWEA.125		0			
Packer, Nipples							STIMT.400		15,000
Pumping Unit, Engine							STIMT.405		0
Downhole Lift Equipment							STIMT.410		60,000
Surface Equipment									
Well Automation Materials									
Total Tangible - Well Equipment Cost			83,000			353,000			151,000
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Line Pipe									
SWD/Other - Materials									
SWD/OTHER - LINE PIPE									
Total Tangible - Lease Equipment Cost									
Total Estimated Cost			**2,187,400**			**717,020**			**5,646,000**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

		Production Equip			Post Completion		Total
Description	Codes	Amount	Codes		Amount	Cost
Roads & Location	CON.100	8,000	PCOM.100	Pad/Road Clean Up	28,000	111,000
Damages	CON.105	2,500				12,500
Mud/Fluids Disposal			PCOM.255	3,000 BWPD for 60 days @ $0.25/bbl	45,000	298,000
Day Rate						537,420
Misc Preparation						35,000
Bits			PCOM.125		0	65,000
Fuel			PCOM.130		0	74,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	41,000
Mud & Additives						225,000
Surface Rentals	CON.140	4,000	PCOM.140	$1,030/d for Production Target of 30 Days	30,900	309,900
Downhole Rentals			PCOM.145		0	74,000
Flowback Labor			PCOM.141	$960/d for Production Target of 14 Day	13,440	13,440
Automation Labor	CON.150	25,000	PCOM.150		0	25,000
Formation Evaluation (DST, Coring, etc.)						0
Mud Logging						22,000
Open Hole Logging						0
Cementing & Float Equipment						235,000
Tubular Inspections			PCOM.160		0	32,000
Casing Crews						32,000
Mechanical Labor	CON.170	52,000	PCOM.170		0	75,000
Trucking/Transportation	CON.175	6,500	PCOM.175		0	38,500
Supervision	CON.180	5,000	PCOM.180		0	177,000
Trailer House/Camp/Catering						86,000
Other Misc Expenses	CON.190	20,000	PCOM.190		0	168,000
Overhead						15,000
Remedial Cementing			PCOM.215		0	0
MOB/DEMOB						75,000
Directional Drilling Services						201,000
Solids Control						74,000
Well Control Equip (Snubbing Services)			PCOM.240		0	155,000
Fishing & Sidetrack Services			PCOM.245		0	0
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	393,000
Completion Logging/Perforating/Wireline			PCOM.200		0	410,000
Composite Plugs			PCOM.390		0	108,000
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	2,926,000
Stimulation Water/Water Transfer/Water						702,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	42,000
Legal/Regulatory/Curative	CON.300	0				10,000
Well Control Insurance						6,000
Major Construction Overhead	CON.305	12,500				12,500
Real Time Operations Center						0
FL/GL - Labor	CON.500	99,500				99,500
FL/GL - Supervision	CON.505	7,000				7,000
Survey	CON.515	0				0
SWD/Other - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605	0				0
Contingency	CON.220	25,500	PCOM.220		0	404,500
Contingency	CON.221	15,000				15,000
P&A Costs						0
Total Intangible Cost		282,500			117,340	8,363,260
Drive Pipe						0
Conductor Pipe						0
Water String						0
Surface Casing						14,000
Intermediate Casing 1						49,000
Intermediate Casing 2						0
Drilling Liner						0
Production Casing or Liner						333,000
Production Tie-Back						0
Tubing			PCOMT.105		0	51,000
Wellhead, Tree, Chokes			PCOMT.120		0	65,000
Liner Hanger, Isolation Packer						0
Packer, Nipples			PCOMT.400		0	15,000
Pumping Unit, Engine			PCOMT.405		0	0
Downhole Lift Equipment			PCOMT.410		0	60,000
Surface Equipment			PCOMT.420	XEC Owned Sand Separator	59,000	59,000
Well Automation Materials			PCOMT.455		0	0
Total Tangible - Well Equipment Cost					59,000	646,000
N/C Lease Equipment	CONT.400	57,000				57,000
Tanks, Tanks Steps, Stairs	CONT.405	0				0
Battery Equipment	CONT.410	0				0
Secondary Containments	CONT.415	8,500				8,500
Overhead Power Distribution	CONT.420	0				0
Facility Electrical	CONT.425	22,500				22,500
Telecommunication Equipment	CONT.426	0				0
Meters and Metering Equipment	CONT.445	3,500				3,500
Facility Line Pipe	CONT.450	6,000				6,000
Lease Automation Materials	CONT.455	23,000				23,000
FL/GL - Materials	CONT.550	14,500				14,500
FL/GL - Line Pipe	CONT.555	25,000				25,000
SWD/Other - Materials	CONT.650	0				0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost		160,000				160,000
Total Estimated Cost		**442,500**			**176,340**	**9,169,260**

CIMAREX Authorization For Expenditure Drilling AFE # 26621010

Company Entity

Date Prepared
4/23/2019

Exploration Region	Well Name	Prospect	Property Number	AFE
Permian Basin	HAYDUKE 34-3 FEDERAL COM 10H	Carlsbad Bone Spring Prospect	300001-137.01	26621010

County, State	Location	Estimated Spud	Estimated Completion
Eddy, NM	SHL: W/2 of Section 34, Township 25 South, Range 26 East, Eddy County, NM BHL: W/2 of Section 3, Township 26 South, Range 26 East, Eddy County, NM	1/1/2021	2/1/2021

	Formation	Well Type	Ttl Measured Depth	Ttl Vetical Depth
X New Supplement Revision	Bone Spring 2 /Sd/	DEV	17,500	7,450

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 400' set surface casing. Drill to 1876' set intermediate casing. Drill to 7203' (KOP). Drill curve at 12°/100' initial build rate to +/- 90 degrees and 7680' TVD and drill a +/- 9460' long lateral in the Bone Spring formation. Run and cement production casing. Stage frac in 48 stages. Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	$2,104,400		$2,104,400
Completion Costs		$6,258,860	$6,258,860
Total Intangible Cost	**$2,104,400**	**$6,258,860**	**$8,363,260**

Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	$83,000	$563,000	$646,000
Lease Equipment		$160,000	$160,000
Total Tangible Cost	**$83,000**	**$723,000**	**$806,000**

Total Well Cost	**$2,187,400**	**$6,981,860**	**$9,169,260**

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.**

Marketing Election

Cimarex sells its gas under arm's-length contracts with third party purchasers. Such contracts may include fees. In addition, penalties may be incurred for insufficient volumes delivered over time. Should you choose to market your share of gas with Cimarex, you will be subject to all of the terms of such contracts. Upon written request to Cimarex's Marketing Department, we will share with you the terms and conditions pursuant to which gas will be sold. Failure to make an election below shall be deemed an election to market your gas with Cimarex under the terms and conditions set forth above.

☐ **I elect to take my gas in kind.**

☐ **I elect to market my gas with Cimarex pursuant to the terms and conditions of its contract.**

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.

Nonoperator Approval

Company	Approved By (Print Name)	Approved By (Signature)	Date

NOTICE TO NONOPERATOR: Costs shown on this form are estimates only. By executing this AFE, the consenting party agrees to pay its proportionate share of actual costs incurred. Overhead will be charged in accordance with the Joint Operating Agreement. *4/23/2019*

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

Description	BCP - Drilling		ACP - Drilling		Comp/Stim		Production Equip		Post Completion		Total
	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Codes	Amount	Cost
Roads & Location	DIDC.100	70,000			STIM.100	5,000	CON.100	8,000	PCOM.100	28,000	111,000
Damages	DIDC.105	10,000					CON.105	2,500			12,500
Mud/Fluids Disposal	DIDC.255	200,000			STIM.255	53,000			PCOM.255	45,000	298,000
Day Rate	DIDC.115	413,400	DICC.120	124,020							537,420
Misc Preparation	DIDC.120	35,000									35,000
Bits	DIDC.125	65,000	DICC.125	0	STIM.125	0			PCOM.125	0	65,000
Fuel	DIDC.135	74,000	DICC.130	0					PCOM.130	0	74,000
Water for Drilling Rig (Not Frac Water)	DIDC.140	3,000	DICC.135	0	STIM.135	38,000			PCOM.135	0	41,000
Mud & Additives	DIDC.145	225,000									225,000
Surface Rentals	DIDC.150	86,000	DICC.140	0	STIM.140	189,000	CON.140	4,000	PCOM.140	30,900	309,900
Downhole Rentals	DIDC.155	74,000			STIM.145	0			PCOM.145	0	74,000
Flowback Labor					STIM.141	0			PCOM.141	13,440	13,440
Automation Labor							CON.150	25,000	PCOM.150	0	25,000
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0					0
Mud Logging	DIDC.170	22,000									22,000
Open Hole Logging	DIDC.180	0									0
Cementing & Float Equipment	DIDC.185	85,000	DICC.155	150,000							235,000
Tubular Inspections	DIDC.190	25,000	DICC.160	5,000	STIM.160	2,000			PCOM.160	0	32,000
Casing Crews	DIDC.195	12,000	DICC.165	20,000	STIM.165	0					32,000
Mechanical Labor	DIDC.200	20,000	DICC.170	3,000	STIM.170	0	CON.170	52,000	PCOM.170	0	75,000
Trucking/Transportation	DIDC.205	15,000	DICC.175	15,000	STIM.175	2,000	CON.175	6,500	PCOM.175	0	38,500
Supervision	DIDC.210	80,000	DICC.180	18,000	STIM.180	74,000	CON.180	5,000	PCOM.180	0	177,000
Trailer House/Camp/Catering	DIDC.280	37,000	DICC.255	7,000	STIM.280	42,000					86,000
Other Misc Expenses	DIDC.220	3,000	DICC.190	0	STIM.190	145,000	CON.190	20,000	PCOM.190	0	168,000
Overhead	DIDC.225	10,000	DICC.195	5,000							15,000
Remedial Cementing	DIDC.231	0			STIM.215	0			PCOM.215	0	0
MOB/DEMOB	DIDC.240	75,000									75,000
Directional Drilling Services	DIDC.245	201,000									201,000
Solids Control	DIDC.260	74,000									74,000
Well Control Equip (Snubbing Services)	DIDC.265	74,000	DICC.240	0	STIM.240	81,000			PCOM.240	0	155,000
Fishing & Sidetrack Services	DIDC.270	0	DICC.245	0	STIM.245	0			PCOM.245	0	0
Completion Rig					STIM.115	21,000			PCOM.115	0	21,000
Coil Tubing Services					STIM.260	393,000			PCOM.260	0	393,000
Completion Logging/Perforating/Wireline					STIM.200	410,000			PCOM.200	0	410,000
Composite Plugs					STIM.390	108,000			PCOM.390	0	108,000
Stimulation Pumping/Chemicals/Additives/Sand					STIM.210	2,926,000			PCOM.210	0	2,926,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	702,000					702,000
Cimarex Owned Frac/Rental Equipment					STIM.305	42,000			PCOM.305	0	42,000
Legal/Regulatory/Curative	DIDC.300	10,000					CON.300	0			10,000
Well Control Insurance	DIDC.285	6,000									6,000
Major Construction Overhead							CON.305	12,500			12,500
Real Time Operations Center	DIDC.560	0			STIM.560	0					0
FL/GL - Labor							CON.500	99,500			99,500
FL/GL - Supervision							CON.505	7,000			7,000
Survey							CON.515	0			0
SWD/Other - Labor							CON.600	0			0
SWD/OTHER - SUPERVISION							CON.605	0			0
Contingency	DIDC.435	100,000	DICC.220	17,000	STIM.220	262,000	CON.220	25,500	PCOM.220	0	404,500
Contingency							CON.221	15,000			15,000
P&A Costs	DIDC.295	0	DICC.275	0							0
Total Intangible Cost		2,104,400		364,020		5,495,000		282,500		117,340	8,363,260
Drive Pipe	DWEB.150	0									0
Conductor Pipe	DWEB.130	0									0
Water String	DWEB.135	0									0
Surface Casing	DWEB.140	14,000									14,000
Intermediate Casing 1	DWEB.145	49,000									49,000
Intermediate Casing 2	DWEB.155	0									0
Drilling Liner	DWEB.160	0									0
Production Casing or Liner			DWEA.100	333,000							333,000
Production Tie-Back			DWEA.165	0	STIMT.101	0					0
Tubing					STIMT.105	51,000			PCOMT.105	0	51,000
Wellhead, Tree, Chokes	DWEB.115	20,000	DWEA.120	20,000	STIMT.120	25,000			PCOMT.120	0	65,000
Liner Hanger, Isolation Packer	DWEB.100	0	DWEA.125	0							0
Packer, Nipples					STIMT.400	15,000			PCOMT.400	0	15,000
Pumping Unit, Engine					STIMT.405	0			PCOMT.405	0	0
Downhole Lift Equipment					STIMT.410	60,000			PCOMT.410	0	60,000
Surface Equipment									PCOMT.420	59,000	59,000
Well Automation Materials									PCOMT.455	0	0
Total Tangible - Well Equipment Cost		83,000		353,000		151,000				59,000	646,000
N/C Lease Equipment							CONT.400	57,000			57,000
Tanks, Tanks Steps, Stairs							CONT.405	0			0
Battery Equipment							CONT.410	0			0
Secondary Containments							CONT.415	8,500			8,500
Overhead Power Distribution							CONT.420	0			0
Facility Electrical							CONT.425	22,500			22,500
Telecommunication Equipment							CONT.426	0			0
Meters and Metering Equipment							CONT.445	3,500			3,500
Facility Line Pipe							CONT.450	6,000			6,000
Lease Automation Materials							CONT.455	23,000			23,000
FL/GL - Materials							CONT.550	14,500			14,500
FL/GL - Line Pipe							CONT.555	25,000			25,000
SWD/Other - Materials							CONT.650	0			0
SWD/OTHER - LINE PIPE							CONT.655	0			0
Total Tangible - Lease Equipment Cost								160,000			160,000
Total Estimated Cost		**2,187,400**		**717,020**		**5,646,000**		**442,500**		**176,340**	**9,169,260**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

Description	BCP - Drilling Codes		BCP - Drilling Amount	ACP - Drilling Codes		ACP - Drilling Amount	Comp/Stim Codes		Comp/Stim Amount
Roads & Location	DIDC.100		70,000				STIM.100		5,000
Damages	DIDC.105		10,000						
Mud/Fluids Disposal	DIDC.255		200,000				STIM.255		53,000
Day Rate	DIDC.115	14 days at $26,000/day	413,400	DICC.120	5 days at $26,000/day	124,020			
Misc Preparation	DIDC.120		35,000						
Bits	DIDC.125		65,000	DICC.125		0	STIM.125		0
Fuel	DIDC.135	1,300 gal/day at $3.00/gal	74,000	DICC.130		0			
Water for Drilling Rig (Not Frac Water)	DIDC.140		3,000	DICC.135		0	STIM.135		38,000
Mud & Additives	DIDC.145		225,000						
Surface Rentals	DIDC.150	Per Day (BCP)/day	86,000	DICC.140		0	STIM.140		189,000
Downhole Rentals	DIDC.155		74,000				STIM.145		0
Flowback Labor							STIM.141		0
Automation Labor									
Formation Evaluation (DST, Coring, etc.)	DIDC.160		0				STIM.150		0
Mud Logging	DIDC.170	14 days at $1,200/day	22,000						
Open Hole Logging	DIDC.180		0						
Cementing & Float Equipment	DIDC.185		85,000	DICC.155		150,000			
Tubular Inspections	DIDC.190		25,000	DICC.160		5,000	STIM.160		2,000
Casing Crews	DIDC.195		12,000	DICC.165		20,000	STIM.165		0
Mechanical Labor	DIDC.200		20,000	DICC.170		3,000	STIM.170		0
Trucking/Transportation	DIDC.205		15,000	DICC.175		15,000	STIM.175		2,000
Supervision	DIDC.210		80,000	DICC.180		18,000	STIM.180		74,000
Trailer House/Camp/Catering	DIDC.280		37,000	DICC.255		7,000	STIM.280		42,000
Other Misc Expenses	DIDC.220		3,000	DICC.190		0	STIM.190		145,000
Overhead	DIDC.225		10,000	DICC.195		5,000			
Remedial Cementing	DIDC.231		0				STIM.215		0
MOB/DEMOB	DIDC.240		75,000						
Directional Drilling Services	DIDC.245		201,000						
Solids Control	DIDC.260		74,000						
Well Control Equip (Snubbing Services)	DIDC.265		74,000	DICC.240		0	STIM.240		81,000
Fishing & Sidetrack Services	DIDC.270		0	DICC.245		0	STIM.245		0
Completion Rig							STIM.115		21,000
Coil Tubing Services							STIM.260		393,000
Completion Logging/Perforating/Wireline							STIM.200		410,000
Composite Plugs							STIM.390		108,000
Stimulation							STIM.210		2,926,000
Stimulation Water/Water Transfer/Water							STIM.395		702,000
Cimarex Owned Frac/Rental Equipment							STIM.305		42,000
Legal/Regulatory/Curative	DIDC.300		10,000						
Well Control Insurance	DIDC.285	$0.35/ft	6,000						
Major Construction Overhead									
Real Time Operations Center	DIDC.560		0				STIM.560		0
FL/GL - Labor									
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION									
Contingency	DIDC.435	500 % of Drilling Intangibles	100,000	DICC.220		17,000	STIM.220		262,000
Contingency									
P&A Costs	DIDC.295		0	DICC.275		0			
Total Intangible Cost			2,104,400			364,020			5,495,000
Drive Pipe	DWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB.135		0						
Surface Casing	DWEB.140	13 3/8" - 400ft at $35.00/ft	14,000						
Intermediate Casing 1	DWEB.145	9 5/8" - 1,876ft at $26.00/ft	49,000						
Intermediate Casing 2	DWEB.155		0						
Drilling Liner	DWEB.160		0						
Production Casing or Liner				DWEA.100	5 1/2" - 17,519ft at $19.00/ft	333,000			
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing							STIMT.105	2 7/8" - 7,300ft at $7.00/ft	51,000
Wellhead, Tree, Chokes	DWEB.115		20,000	DWEA.120		20,000	STIMT.120		25,000
Liner Hanger, Isolation Packer	DWEB.100		0	DWEA.125		0			
Packer, Nipples							STIMT.400		15,000
Pumping Unit, Engine							STIMT.405		0
Downhole Lift Equipment							STIMT.410		60,000
Surface Equipment									
Well Automation Materials									
Total Tangible - Well Equipment Cost			83,000			353,000			151,000
N/C Lease Equipment									
Tanks, Tanks Steps, Stairs									
Battery Equipment									
Secondary Containments									
Overhead Power Distribution									
Facility Electrical									
Telecommunication Equipment									
Meters and Metering Equipment									
Facility Line Pipe									
Lease Automation Materials									
FL/GL - Materials									
FL/GL - Line Pipe									
SWD/Other - Materials									
SWD/OTHER - LINE PIPE									
Total Tangible - Lease Equipment Cost									
Total Estimated Cost			**2,187,400**			**717,020**			**5,646,000**

CIMAREX

Authorization For Expenditure - HAYDUKE 34-3 FEDERAL COM 10H

AFE # 26621010

		Production Equip			Post Completion		Total
Description	Codes	Amount	Codes		Amount	Cost
Roads & Location	CON.100	8,000	PCOM.100	Pad/Road Clean Up	28,000	111,000
Damages	CON.105	2,500				12,500
Mud/Fluids Disposal			PCOM.255	3,000 BWPD for 60 days @ $0.25/bbl	45,000	298,000
Day Rate						537,420
Misc Preparation						35,000
Bits			PCOM.125		0	65,000
Fuel			PCOM.130		0	74,000
Water for Drilling Rig (Not Frac Water)			PCOM.135		0	41,000
Mud & Additives						225,000
Surface Rentals	CON.140	4,000	PCOM.140	$1,030/d for Production Target of 30 Days	30,900	309,900
Downhole Rentals			PCOM.145		0	74,000
Flowback Labor			PCOM.141	$960/d for Production Target of 14 Day	13,440	13,440
Automation Labor	CON.150	25,000	PCOM.150		0	25,000
Formation Evaluation (DST, Coring, etc.)						0
Mud Logging						22,000
Open Hole Logging						0
Cementing & Float Equipment						235,000
Tubular Inspections			PCOM.160		0	32,000
Casing Crews						32,000
Mechanical Labor	CON.170	52,000	PCOM.170		0	75,000
Trucking/Transportation	CON.175	6,500	PCOM.175		0	38,500
Supervision	CON.180	5,000	PCOM.180		0	177,000
Trailer House/Camp/Catering						86,000
Other Misc Expenses	CON.190	20,000	PCOM.190		0	168,000
Overhead						15,000
Remedial Cementing			PCOM.215		0	0
MOB/DEMOB						75,000
Directional Drilling Services						201,000
Solids Control						74,000
Well Control Equip (Snubbing Services)			PCOM.240		0	155,000
Fishing & Sidetrack Services			PCOM.245		0	0
Completion Rig			PCOM.115		0	21,000
Coil Tubing Services			PCOM.260		0	393,000
Completion Logging/Perforating/Wireline			PCOM.200		0	410,000
Composite Plugs			PCOM.390		0	108,000
Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	2,926,000
Stimulation Water/Water Transfer/Water						702,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	42,000
Legal/Regulatory/Curative	CON.300	0				10,000
Well Control Insurance						6,000
Major Construction Overhead	CON.305	12,500				12,500
Real Time Operations Center						0
FL/GL - Labor	CON.500	93,500				93,500
FL/GL - Supervision	CON.505	7,000				7,000
Survey	CON.515	0				0
SWD/Other - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605	0				0
Contingency	CON.220	25,500	PCOM.220		0	404,500
Contingency	CON.221	15,000				15,000
P&A Costs						0
Total Intangible Cost		282,500			117,340	8,363,260
Drive Pipe						0
Conductor Pipe						0
Water String						0
Surface Casing						14,000
Intermediate Casing 1						49,000
Intermediate Casing 2						0
Drilling Liner						0
Production Casing or Liner						333,000
Production Tie-Back						0
Tubing			PCOMT.105		0	51,000
Wellhead, Tree, Chokes			PCOMT.120		0	65,000
Liner Hanger, Isolation Packer						0
Packer, Nipples			PCOMT.400		0	15,000
Pumping Unit, Engine			PCOMT.405		0	0
Downhole Lift Equipment			PCOMT.410		0	60,000
Surface Equipment			PCOMT.420	XEC Owned Sand Separator	59,000	59,000
Well Automation Materials			PCOMT.455		0	0
Total Tangible - Well Equipment Cost					59,000	646,000
N/C Lease Equipment	CONT.400	57,000				57,000
Tanks, Tanks Steps, Stairs	CONT.405	0				0
Battery Equipment	CONT.410	0				0
Secondary Containments	CONT.415	8,500				8,500
Overhead Power Distribution	CONT.420	0				0
Facility Electrical	CONT.425	22,500				22,500
Telecommunication Equipment	CONT.426	0				0
Meters and Metering Equipment	CONT.445	3,500				3,500
Facility Line Pipe	CONT.450	6,000				6,000
Lease Automation Materials	CONT.455	23,000				23,000
FL/GL - Materials	CONT.550	14,500				14,500
FL/GL - Line Pipe	CONT.555	25,000				25,000
SWD/Other - Materials	CONT.650	0				0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost		160,000				160,000
Total Estimated Cost		**442,500**			**176,340**	**9,169,260**

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF CIMAREX ENERGY CO. FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO

CASE NO. 20784

APPLICATION

Cimarex Energy Co. ("Cimarex"), OGRID Number 215099, through its undersigned attorneys, hereby makes an application to the Oil Conservation Division pursuant to the provisions of NMSA (1978), Section 70-2-17, for an order pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 34, Township 25 South, Range 26 East, and E/2 W/2 of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico. In support of this application, Cimarex states as follows:

1. Cimarex is an interest owner in the subject lands and has a right to drill wells thereon.

2. Cimarex seeks to dedicate the E/2 W/2 of Section 34, Township 25 South, Range 26 East, and E/2 W/2 of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico to form a 320-acre, more or less, spacing unit.

3. Cimarex plans to drill the **Hayduke 34-3 Federal Com 9H** and **11H** wells to a depth sufficient to test the Bone Spring formation, and laterally in a southerly direction within the formation to the referenced bottom hole location:

- The **Hayduke 34-3 Federal Com 9H** well is a horizontal well with a surface location 390' FNL and 1310' FWL of Section 34, Township 25 South, Range 26 East, Eddy County, and the intended bottom hole location is 100' FSL and 1980' FWL of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico, Eddy County. This well is proposed to be drilled vertically to a depth of approximately 7,300' to the Bone Spring formation.

- The **Hayduke 34-3 Federal Com 11H** well is a horizontal well with a surface location 390' FNL and 1310' FWL of Section 34, Township 25 South, Range 26 East, Eddy County, and the intended bottom hole location is 100' FSL and 1980' FWL of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico, Eddy County. This well is proposed to be drilled vertically to a depth of approximately 7,680' to the Bone Spring formation.

4. These wells will be located within the WC-015 G-03 S252636M; Bone Spring Pool (Pool ID: 97818) and will comply with the Division's setback requirements.

5. Cimarex sought, but has been unable to obtain, a voluntary agreement from all interest owners in the Bone Spring formation underlying the proposed spacing unit to participate in the drilling of the wells or to otherwise commit their interests to the wells.

6. The creation of a horizontal spacing unit and the pooling of all interests in the Bone Spring formation underlying the proposed unit will prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

WHEREFORE, this case is set for hearing before an Examiner of the Oil Conservation Division on October 3, 2019, Cimarex requests that, after notice and hearing as required by law, the Division enter its order:

A. Creating a horizontal spacing unit in the Bone Spring formation comprised of E/2 W/2 of Section 34, Township 25 South, Range 26 East, and E/2 W/2 of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico;

B. Pooling all mineral interests in the Bone Spring formation underlying a horizontal spacing unit within the E/2 W/2 of Section 34, Township 25 South, Range 26 East, and E/2 W/2 of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico;

C. Designating Cimarex as operator of this unit and the wells to be drilled thereon;

D. Authorizing Cimarex to recover its costs of drilling, equipping and completing these wells;

E. Approving actual operating charges and costs charged for supervision, together with a provision adjusting the rates pursuant to the COPAS accounting procedure;

F. Setting a 200% charge for the risk involved in drilling and completing the well in the event a working interest owner elects not to participate in the wells.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: _____

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500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
edebrine@modrall.com
lance.hough@modrall.com
Attorneys for Applicant

W3488056.DOCX

CASE NO. ____: Application of Cimarex Energy Co. for compulsory pooling, Eddy County, New Mexico. Applicant seeks an order from the Division: (1) to the extent necessary, approving the creation of a 320-acre, more or less, Bone Spring horizontal spacing unit; and, (2) pooling all uncommitted mineral interests within a Bone Spring horizontal spacing unit underlying the E/2 W/2 of Section 34, Township 25 South, Range 26 East, and E/2 W/2 of Section 3, Township 26 South, Range 26 East, NMPM, Eddy County, New Mexico. This spacing unit will be dedicated to the **Hayduke 34-3 Federal Com 9H** and **11H** wells, to be horizontally drilled. The producing area for these wells will be orthodox. Also to be considered will be the cost of drilling and completing said wells, the allocation of these costs as well as the actual operating costs and charges for supervision, designation of Cimarex as operator of the wells, and a 200% charge for risk involved in drilling said wells. Said area is located approximately 8.5 miles southeast of Whites City, New Mexico.

Hayduke 34-3 – Bone Spring Wells

E/2W/2 of Section 34, Township 25S, Range 26 East, Eddy County, NM
E/2W/2 of Section 3, Township 26 South, Range 26 East, Eddy County, NM

Owner – Bone Spring	Tract	Net	Working Interest Percentage	Force Pool Interest
Cimarex Energy Co.	1,3,4	305	95.3125%	No – Operator
Partnership Properties Company	3	15	4.6875%	Yes
TOTAL			100%	

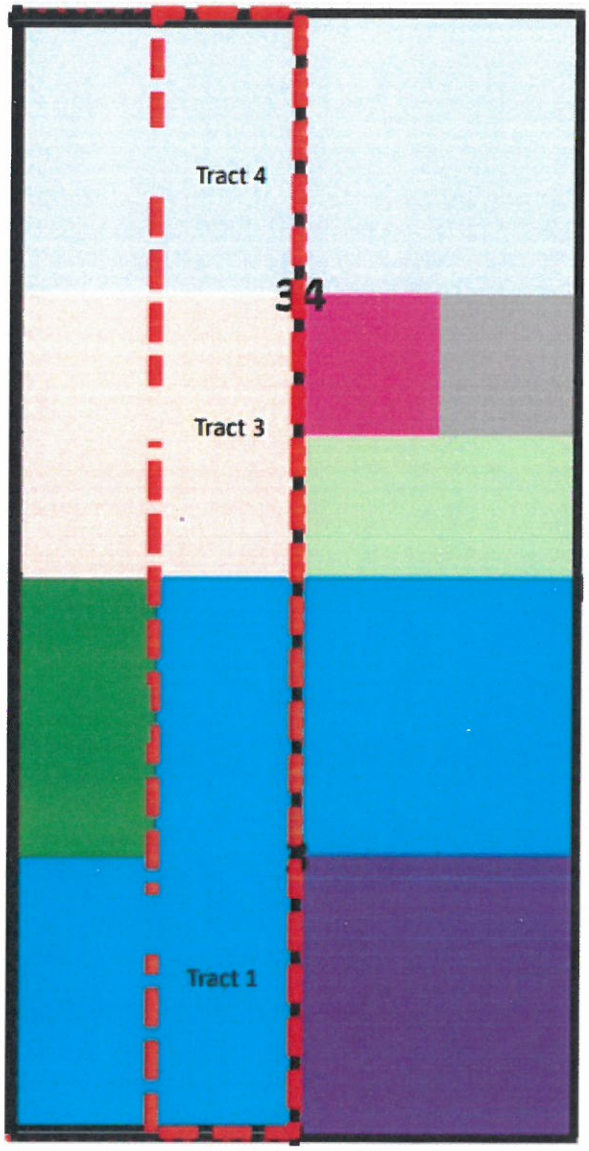

EXHIBIT
A-6

E/2W/2 Bone Spring Unit

ORRI Owner	Tract #
Chevron USA Inc	4
Howard A. Rubin, Inc.	4
Robert N. Enfield, Trustee of the Robert N. Enfield Revocable Trust dtd March 16, 1999	4
Bryan Bell Family LLC	4
Rubie Crosby Bell Family LLC	4
Bryan Bell Family LLC	4
Estate of Jerune Allen, deceased	4
DMA, Inc.	3
Robert N. Enfield, Trustee of the Robert N. Enfield Revocable Trust dtd March 16, 1999	3
Charmar, LLC	4
Lisa M. Enfield, Trustee of the The Lisa M. Enfield Trust u/t/a dtd 1/23/2015	4
MLE, LLC	4
Richard C. Deason	4
Ronald H. Mayer, Trustee of the Ronand H. Mayer and Martha M. Mayer Revocable Trust dated March 19, 1990	4
SAP, LLC	4
Barbara Carol Deason, ssp	4
Thomas D. Deason, ssp	4
Macondo Fund IV, Ltd.	3
Celeste Grynberg as her sole and separate property	3
Jack J. Grynberg et ux Celeste Grynberg	3
USA	1,3,4