District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210

Phone: (275) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV.

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

# State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	<sup>2</sup> Pool Code	3 Pool Name
Property Code	5 Property Name DAVINCI 7-18 FEDERAL	COM 6 Well Number 29H
7 OGRID No.	* Operator Name CIMAREX ENERGY C	O. **Elevation 3308.9**

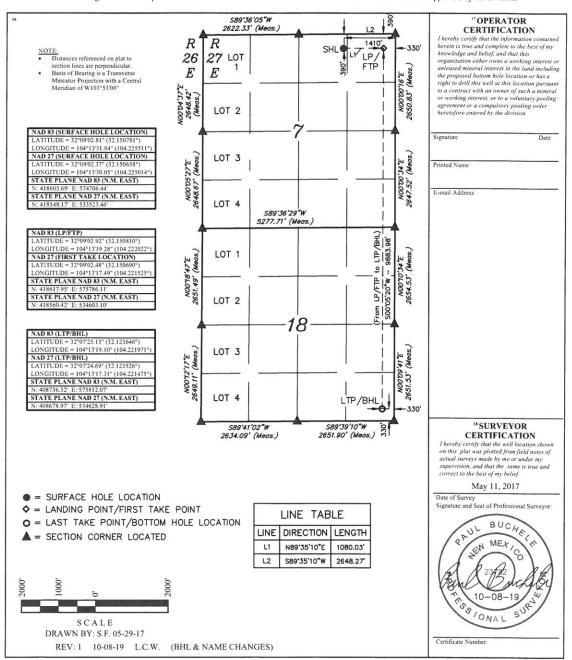
#### "Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	٦
В	7	25S	27E	1.00000000	390	NORTH	1410	EAST	EDDY	-

#### "Bottom Hole Location If Different From Surface

UL or lot no. P	Secti 18	,	Township 25S	Range 27E	Lot Idn	Feet from the 330	North/South line SOUTH	Feet from the 330	East/West line EAST	County EDDY
12 Dedicated Acre	es	13 Jo	int or Infill	14 Conso	lidation Code	15 Order No.				

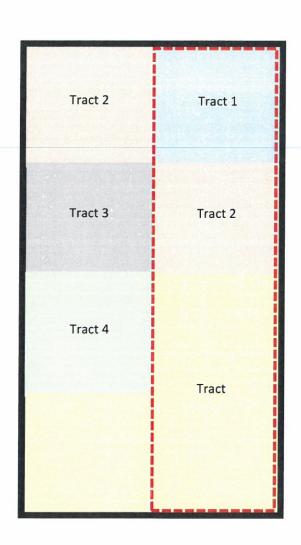
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



### Da Vinci 7-18 Federal Com 29H - Wolfcamp

## E/2 of Section 7, Township 25 South, Range 27 East, Eddy County, NM E/2 of Section 18, Township 25 South, Range 27 East, Eddy County, NM

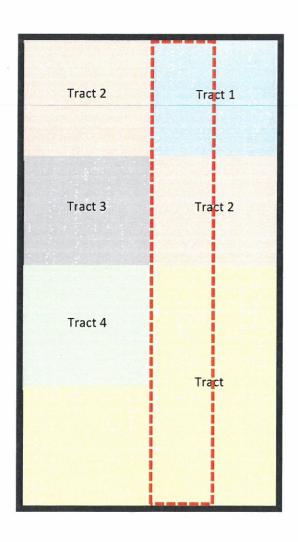
Owner - Bone Spring	Tract	Net	Working Interest Percentage	Force Pool Interest
Cimarex Energy Co.	1, 2	319.285	49.944078%	No – Operator
Chevron USA Inc	5	312	48.804524%	No
TLW Investments	5	8	1.251398%	Yes
TOTAL			100%	



### Da Vinci 7-18 Federal Com 30H – Bone Spring

E/2 of Section 7, Township 25 South, Range 27 East, Eddy County, NM E/2 of Section 18, Township 25 South, Range 27 East, Eddy County, NM

ORRI Owner – Wolfcamp	Tract
Chevron USA Inc	1,2,5
EOG A Resources, Inc	1,2,5
EOG M Resources Inc	1,2,5
EOG Y Resources, Inc	1,2,5
Oxy Y-1 Company	1,2,5



Cimarex Energy Co.

600 N. Marienfeld St. Suite 600

Midland, TX 79701

MAIN 432.571.7800

October 9, 2019



Via-CMRRR

TLW Investments 1001 Fannin Ste. 2020 Houston, Texas 77002 Attn: Thad Montgomery

Re:

New Well Proposal- DaVinci 7-18 Fed Com 29H

E/2: Section 7 & 18, Township 25 South, Range 27 East, N.M.P.M.

Eddy County, New Mexico

Dear Working Interest Owner:

Cimarex Energy Co. hereby proposes to drill the DaVinci 7-18 Fed Com 29H well at a legal location in the E/2 of Section 7, Township 25 South Range 27 East, Eddy County, New Mexico.

The intended surface hole location for the well is 390' FNL and 1410' FEL of Section 7, Township 25 South, Range 27 East, Eddy County, and the intended bottom hole location is 330' FSL and 2317' FEL of Section 18, Township 25 South, Range 27 East, Eddy County. The well is proposed to be drilled vertically to a depth of approximately 9,555' to the Wolfcamp formation and laterally in a southerly direction within the formation to the referenced bottom hole location. Total measured depth of the well is proposed to be approximately 20,534' feet from surface to terminus.

It should be understood that compliance with topography or cultural or environmental concerns, among others, might require modification of Cimarex's intended procedure. Cimarex will advise you of any such modifications.

Enclosed, in duplicate, is (i) our detailed AFE reflecting estimated costs associated with this proposal, and; (ii) our proposed form of Operating Agreement to govern operations of the DaVinci 7-18 Fed Com 29H well. If you intend to participate, please approve and return one (1) original of the enclosed AFE, and one (1) original of the signature page to the Operating Agreement along with the contact information to receive your well data, to the undersigned within thirty (30) days of receipt of this proposal. If you elect to purchase your own well control insurance, you must provide a certificate of such insurance to Cimarex prior to commencement of drilling operations; otherwise, you will be covered by insurance procured by Cimarex and will be responsible for your share of the cost.

Please note that Cimarex is open to discuss an Assignment or Farmout of your working interest in the subject acreage. Should you be interested or have any questions, please feel to contact the undersigned.

If you should have any questions or comments, please do not hesitate to contact the undersigned at (432) 571-7862 if you should have any questions or comments.

Respectfully,

Cimarex Energy Co. Caitlin Pierce, Dandman

CP/ps CP/ps Enclosures as stated

#### ELECTION TO PARTICIPATE DaVinci 7-18 Fed Com 29H

TLW Investments elects <b>TO</b> participate in the proposed DaVinci 7-18 Fed Com 29H.
TLW Investments elects <b>NOT</b> to participate in the proposed DaVinci 7-18 Fed Com 29H.
Dated this , 2019.
Signature:
Γitle:
f your election above is TO participate in the proposed DaVinci 7-18 Fed Com 29H, then:
TLW Investments elects <b>TO</b> be covered by well control insurance procured by Cimarex Energy Co.
TLW Investments elects <b>NOT</b> 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.



2			man		ent
3				-	on not directly charged under Section II.2 (Labor)
4					rices not directly chargeable under Section II.9 (Legal Expense)
5					other than those costs identified as directly chargeable under Section II.10 (Taxes and Permits)
6					on and monitoring of permits and certifications; preparing regulatory reports; appearances before or meetings with
7			8 8		ental agencies or other authorities having jurisdiction over the Joint Property, other than On-site inspections; reviewing,
8					ng, or submitting comments on or lobbying with respect to Laws or proposed Laws.
9			11100	pieta	ng of sacrificant of or to to of the man respect to many or proposed many.
10	Ove	rhead	char	rec ch	nall include the salaries or wages plus applicable payroll burdens, benefits, and Personal Expenses of personnel performing
11					as well as office and other related expenses of overhead functions.
12	010	ilload	Iunon	, ,	as well as office and office related expenses of overhead faileholds.
13	1.	OV	ERHI	EAD.	-DRILLING AND PRODUCING OPERATIONS
14	1.	01	EKIL		- DREEDING AND I RODGERING OF ERRYTIONS
15		Ac	compe	encati	on for costs incurred but not chargeable under Section II (Direct Charges) and not covered by other provisions of this
16					Operator shall charge on either:
17		Dec		1, 11.0	Operator shall enable on stater.
18			Ø	(Alt	ternative 1) Fixed Rate Basis, Section III.1.B.
19					ternative 2) Percentage Basis, Section III.1.C.
20			house	(	to that to all to to thing of the transfer of
21		A.	TEC	'HNT	CAL SERVICES
22			150		57th 52tt 1055
23			(i)	Exc	ept as otherwise provided in Section II.13 (Ecological Environmental, and Safety) and Section III.2 (Overhead - Major
24			(*)		instruction and Catastrophe), or by approval of the Parties pursuant to Section I.6.A (General Matters), the salaries, wages,
25					ted payroll burdens and benefits, and Personal Expenses for On-site Technical Services, including third party Technical
26					vices:
27					
28				Ø	(Alternative 1 - Direct) shall be charged direct to the Joint Account.
29				2000	<u> </u>
30					(Alternative 2 - Overhead) shall be covered by the overhead rates.
31					
32			(ii)	Exc	ept as otherwise provided in Section II.13 (Ecological, Environmental, and Safety) and Section III.2 (Overhead - Major
33					istruction and Catastrophe), or by approval of the Parties pursuant to Section I.6.A (General Matters), the salaries, wages.
34					ted payroll burdens and benefits, and Personal Expenses for Off-site Technical Services, including third party Technical
35					rices:
36					9
37				M	(Alternative 1 - All Overhead) shall be covered by the overhead rates.
38					,
39					(Alternative 2 - All Direct) shall be charged direct to the Joint Account.
40					
41					(Alternative 3 - Drilling Direct) shall be charged direct to the Joint Account, only to the extent such Technical Services
42					are directly attributable to drilling, redrilling, deepening, or sidetracking operations, through completion, temporary
43					abandonment, or abandonment if a dry hole. Off-site Technical Services for all other operations, including workover,
44					recompletion, abandonment of producing wells, and the construction or expansion of fixed assets not covered by Section
45					III.2 (Overhead - Major Construction and Catastrophe) shall be covered by the overhead rates.
46					
47		Not	withst	andin	g anything to the contrary in this Section III, Technical Services provided by Operator's Affiliates are subject to limitations
48		set :	forth i	n Sec	ction II.7 (Affiliates). Charges for Technical personnel performing non-technical work shall not be governed by this Section
49		III.1	.A, bı	it inst	tead governed by other provisions of this Accounting Procedure relating to the type of work being performed.
50					
51	B.	OV.	ERHE	AD-	-FIXED RATE BASIS
52					
53		(1)	The	Oper	ator shall charge the Joint Account at the following rates per well per month:
54					
55			Drill	ling V	Well Rate per month \$ 6,500.00 (prorated for less than a full month)
56					
57			Prod	lucing	g Well Rate per month \$_650.00
58					
59		(2)	App	licati	on of Overhead—Drilling Well Rate shall be as follows:
60					
61			(a)		rges for onshore drilling wells shall begin on the spud date and terminate on the date the drilling and/or completion
62					ipment used on the well is released, whichever occurs later. Charges for offshore and inland waters drilling wells shall
63					in on the date the drilling or completion equipment arrives on location and terminate on the date the drilling or completion
64					ipment moves off location, or is released, whichever occurs first. No charge shall be made during suspension of drilling
65				and	or completion operations for fifteen (15) or more consecutive calendar days.
66					

#### Authorization For Expenditure Drilling

AFE # 26619078

Company Entity
Cimarex Energy Co (001)

Date Prepared 10/9/2019

Exploration Region Permian Basin	Well Name DA VINCI 7-18 FEDERAL COM 29H	Prospect Carlsbad Bone Spring Prospec	Property Number 300001-056.01	AFE 26619078
County, State Eddy, NM	Location E/2 of Section 7 & 18-255-27E, Eddy 0	County, New Mexico	Estimated Spud 10/10/2019	Estimated Completion 11/10/2019
X New Supplement Revision	Formation Wolfcamp	Well Type DEV	Itl Measured Depth 20,534	Ttl Vetical Depth 9,555

Purpose Drill and complete well

Description

Drilling Drill and complete a horizontal test. Drill to 450', set water string casing. Drill to 2070', set surface casing. Drill to 9045' (KOP). Drill curve at 12\*/100' initial build rate to +/- 75 degrees and set casing at +/- 9670' MD. Finish curve at +/- 4\*/100' to +/- 9560' TVD and drill a +/- 9900' long lateral in the Wolfcamp C formation. Run and cement production liner. Stage frac.Drill out plugs. Run production packer, tubing and GLVs.

Intangible	Dry Hole	After Casing Point	Completed Well Cost
Drilling Costs	\$2,702,000		\$2,702,000
Completion Costs		\$6,491,978	\$6,491,978
Total Intangible Cost	\$2,702,000	\$6,491,978	\$9,193,978
Tangible	Dry Hole	After Casing Point	Completed Well Cost
Well Equipment	\$390,000	\$505,000	\$895,000
Lease Equipment		\$903,250	\$903,250
Total Tangible Cost	\$390,000	\$1,408,250	\$1,798,250
Total Well Cost	\$3,092,000	\$7,900,228	\$10,992,228

#### 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		and the second contract the contract of the co	a communicación de la secución de la company de capación de la company de capación de la company de capación de
Company	Approved By (Print Name)	Approved By (Signature)	Date
A Section of Section of the Section	A STATE OF THE PARTY OF THE PAR		
	and and an experience of the contract of the c	A CONTRACTOR OF THE PROPERTY O	
NOTICE TO NONOPERATOR: C	osts shown on this form are estimates only. By execut	ing this AFE, the consenting party agrees to pay its proportior	note
share of actual costs incurred. O	verhead will be charged in accordance with the Joint C	Operating Agreement.	10/9/2019



Description Roads & Location Damages		Drilling	Contraction of the contract of	Drilling Amount		Amount		on Equip Amount	Post Cor Codes	Amount	Total Cos
	Codes DIDC.100	Amount 140,000	Codes	Amount	Codes STIM.100	10,000	CON.100	9,000	PCOM.100	28,000	187,00
	DIDC.105	6,000			311141.100	10,000	CON.105	9,500		20,000	15,500
Mud/Fluids Disposal	DIDC255	145,000			STIM.255	53,000		3,300	PCOM.255	60,638	258,63
Day Rate	DIOC.115	525,000	DKC.120	100,000		33,000				00,000	625,00
Misc Preparation	DIDC 120	35,000		100,000						1	35,00
Bits	DIDC.125	85,000	DICC.125	0	STIM.125	0			PCOM.125	0,	85,00
Fuel	DIDC.135	86,000	DICC.130	0					PCOM.130	0	86,00
Water for Drilling Rig (Not Frac Water)	DIDC.140	5,000	DICC.135	0	STIM.135	24,000			PCOM.135	0	29,000
Mud & Additives	DIDC:145	187,000								-1	187,000
SWD PIPED TO XEC SWD WELL	J. D. D. T. IS	107,000							PCONL254	0	, , , , , ,
SWD PIPED TO 3RD PARTY SWD WELL									PCOM.257	0	Ċ
SWD HAULED TO XEC SW/D WELL									PCOM.258	0	Č
SWD HAULED TO 3RD PARTY SWD WELL						:			PCOM.259	0	
Surface Rentals	DIDC.150	120,000	DICC.140	0	STIM.140	237,000	CGN.140	6,000	PCOM.140	30,900	393,900
Downhole Rentals	DIDC.155	145,000			STIM.145	0		3,000	PCOM.145	0.	145,000
Flowback Labor		145,000			STIM.141	. 0			PCOM.141	28,000	28,000
Automation Labor						Í	CON.150	43,250	PCOM:150	0	43,250
Formation Evaluation (DST, Coring, etc.)	DIDC.160	0			STIM.150	0		,	i	ĺ	,
Mud Logging	DIDC.170	24,000					į				24,000
Open Hole Logging	DIDC.180	24,000							110	(	21,000
Cementing & Float Equipment	DIDC.185	144,000	DICC 155	67,000					i	***	211,000
Tubular Inspections	DIDC.190	20,000	DICC.160	5,000	SIM.160	2,000			PCOM.160	0	27,000
Casing Crews	DIDC.195	30,000	DICC.165	13,000	STM.165	0	ì			-	43,000
Mechanical Labor	DIDC.200	15,000	DICC.170	10,000	STIM.170	0	CON.170	187 000	PCOM.170	0	212,000
Trucking/Transportation	DIDC.205	10,000	DICC.17S	8,000	STIM.175	4,000	CON.175	25,000	PCOM.175	0	47,000
Supervision	DIDC.210	104,000	DICC.180	16,000	STIM.180	94,000	CON.180	19,000	PCOM.180	o.	233,000
Trailer House/Camp/Catering	DIDC.280	45,000	DICC25S	6,000	STIM-280	67,000		.5,000		1	118,000
Other Misc Expenses	DIDC.220	5,000	DICC.190	0,000	STIM.190	07,000	CON.190	24,000	PCOM:190	0	29,000
Overhead	DIDC.225	10,000	DICC.195	5,000		J		C-1,000		9	15,000
Remedial Cementing	DIDC.231	10,000		3,000	STIM215	0	i		PCQM.215	0	المارد ا
MOB/DEMO8	DIDC.240	150,000				0				3	150,000
Directional Drilling Services	DIDC.245	377,000				-	į			1	377,000
Solids Control	DIDC.260	66,000				1				į.	66,000
Well Control Well Control Equip (Snubbing Services)	DIDC.265	77,000	DICC.240	5,000	STIM.240	109,000	ĺ		PCOM.240 -	o	191,000
Fishing & Sidetrack Services	DIDC.270	77,000	DICC245	5,000	SRM245	000,000	Į.		PCOM.245	0	סטעונו
Completion Rig	DIDELETO	0	JACCE 13	v	STIM.115	21,000			PCOM.115	0	21,000
Coll Tubing Services					STHM.260	448,000	ļ		PCOM.260	0	448,000
Completion Logging/Perforating/Vireline		-			STIM ZOO	476,000	ĺ		PCOM-200	0	476,000
Composite Plugs					STIM.390	108,000			PCOM.390	0.	108,000
Stimulation Pumping/Chemicals/Additives/Sand		3	İ	-	STIM.210	2,733,000	Í		PCOM.210	0	2,733,000
Stimulation Water/Water Transfer/Water Storage					STIM.395	486,000				7	486,000
Cimarex Owned Frac/Rental Equipment		į			STIM.305	40,000	į		PCOML305	0	40,000
Legsl/Regulatory/Curative	DIDC.300	10,000				40,000	CON.300	0		- 1	10,000
Well Control Insurance	DIDC.285 -	7,000				1				1	7,000
Major Construction Overhead	DIUC.203	7,000		ì			CON.305	38,750		1	38,750
Real Time Operations Canter	DIDC.560	0			STIM.560	0	-	30,130,	1	į	30,730
FL/GL - Labor	Diocsoc	0		- 1		•	CON.500	352,750	1	1	352,750
	i	1				-	CON.505	44,000		į	44,000
FL/GL - Supervision Survey	i					1	CON.515	5,000		1	5,000
SWD/Other - Labor		1		i		į	CON.500	0		1	0
SWD/OTHER - SUPERVISION		1				ì	CON.605	0		1	0
	DIDC.435	129,000	D1CC.220	12,000	ST(M.220	246,000	CON.220	106,000	PCOM.220	8,690	501,690
Contingency	D.DC.433	123,000	Dictary	12,000		240,000	CON.221	61,500		0,030	61,500
Contingency	DIDC.295	oi	DICC.275	n	i	1	1	01,500		-	٥٥٥٥١٥
P&A Costs Total Intangible Cost	DIDCLESS	2,702,000		247,000		5,158,000		930,750		156,228	9,193,978
AND COLUMN TO A COLUMN TO A STATE OF THE PARTY OF THE PAR	DWEB.150	2,102,000;	(44:0) 147 000000	277,000		3,120,000	STREET, STREET, STREET, ST		- remark a severe for		A 2 Page 1 - 1 am Page 1 - 1 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A
Drive Pipe	DWEB.130	*;		1		Š	1			Contraction and Security 211	
Conductor Pina		, n		f			1		ì		0
Conductor Pipe		13,000				-			Ì		0
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Water String Surface Cesing Intermediate Casing 1 Intermediate Casing 2	DWEB.135 DWEB.140 DWEB.145 DWEB.155	13,000 50,000 307,000		edes de circia de Medida de escripcio de esc		And the reason age of designating in a six beam designation in the control				Control of the contro	50,000
Water String Surface Cesing Intermediate Casing 1 Intermediate Casing 2 Oniling Liner	DWEB.135 DWEB.140 DWEB.145	13,000 50,000	DIVER ION	164,000		And have an expeditional to the second decision and other second	100			e e e e e e e e e e e e e e e e e e e	50,000 307,000 0
Water String Surface Cesting Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner	DWEB.135 DWEB.140 DWEB.145 DWEB.155	13,000 50,000 307,000	DIVEA 100	164,000	STIMT 101	And the control of th	THE PROPERTY OF THE PROPERTY O		**************************************	e e e e e e e e e e e e e e e e e e e	50,000
Water String Surface Cesting Intermediate Casting 1 Intermediate Casting 2 Dolling Liner Production Casting or Liner Production Tie-Back	DWEB.135 DWEB.140 DWEB.145 DWEB.155	13,000 50,000 307,000	DAVEA 100 DAVEA 165	164,000 0	STIMT, 101 STIME 10S	00			PCOLIT IOS		50,000 307,000 0 164,000
Water String Surface Cesting Intermediate Casting 1 Intermediate Casting 2 Drilling Liner Production Casting or Liner Production Tie-Back Tubing	DWEB.135 DWEB.140 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000	DIVEA.165	0	STIMT.105	0 82,000 25,000			PCOMT.105	00	50,000 307,000 0 0 164,000 0 82,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubling Wellhead, Tree, Chokes	DWEB.140 DWEB.145 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000		0 82,000 25,000			PCOMT.105 PCOMT.120	0	50,000 307,000 0 0 164,000 0 82,000 65,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Te-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer	DWEB.135 DWEB.140 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DIVEA.165	0	STIMT.10S STIMT.120	25,000			PCOMT.120	0	50,000 307,000 0 0 164,000 0 82,000 65,000 67,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tuising Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples	DWEB.140 DWEB.145 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000	STIMT.105 STIMT.120 STIMT.400				PCOMT.120 PCOMT.400	0	50,000 307,000 0 0 164,000 0 82,000 65,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tutsing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine	DWEB.140 DWEB.145 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0			PCOMT.120 PCOMT.400 PCOMT.405	0	50,000 307,000 0 164,000 82,000 65,000 28,000
Water String Surface Cesing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubling Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engline Dovenhole Lift Equipment	DWEB.140 DWEB.145 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000	STIMT.105 STIMT.120 STIMT.400	25,000			PCOMT.400 PCOMT.405 PCOMT.416	0	50,000 307,000 0 164,000 82,000 65,000 28,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubbing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment	DWEB.140 DWEB.145 DWEB.145 DWEB.155 DWEB.160	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0			PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0	50,000 307,000 0 164,000 82,000 65,000 28,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000			PCOMT.400 PCOMT.405 PCOMT.416	0 0 0 59,000	50,000 307,000 0 164,000 82,000 65,000 67,000 28,000 0 60,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Cading or Liner Production Tie-Back Tutsing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Surface Equipment Surface Surf	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 50,000 307,000 0	DWEA.165 DWEA.120	0 20,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0	CONTRO	270 150	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0	50,000 307,000 0 164,000 62,000 65,000 67,000 28,000 60,000 59,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubling Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engline Dovenhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbio - Well Equipment Cost N/C Lease Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONT/400	208,250	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 82,000 65,000 67,000 28,000 0 60,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tuising Wellinead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Surface Equipment Well Automation Malerdals Total Tangbie - Well Equipment Con N/C Lease Equipment Total Tangbie - Well Equipment Con N/C Lease Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05	0	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 67,000 28,000 0 60,000 59,000 0 895,000 208,250
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tie-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbie - Well Equipment Surface Equipment Surface Equipment Tranks, Tanks Steps, Stairs Battery Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTAIO	0 208,250	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 65,000 60,000 59,000 0 895,000 28,025 0 202,250
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tacing or Liner Production Tie-Back Tutsing Wellhead, Tree, Chokes Uner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engline Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbie - Well Equipment Con N/C Lease Equipment Tanks, Tanks Steps, Stairs Bastery Equipment Secondary Containments	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONT.416 CONT.415	0 208,250 25,750	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 67,000 28,000 0 60,000 59,000 208,250 0 208,250
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Casing or Liner Production Tie-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Surface Equipment Total Tangbie - Well Equipment Con N/C Lease Equipment Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments Overhead Power Distribution	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20	0 208,250 25,750 93,500	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 65,000 0 0 0 0 0 0 20,250 0 208,250 208,250 25,750 33,500
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Ties ack Tutsing Wetlinesd, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Life Equipment Surface Equipment Well Automation Materials Total Tangbio - Well Equipment Cost NYC Lease Equipment Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments Overhead Power Distribution Facility Hectrical	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTAIS CONTAIS CONTAIS CONTAIS	0 208,250 25,750	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 67,000 28,000 0 60,000 59,000 202,250 208,250 208,250 208,250 208,250
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tie-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbie - Well Equipment ON/C Lease Equipment Surface Equipment Secondary Containments Overhead Powar Distribution Facility Hectical Telecommunication Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20 CONTA25 CONTA26	0 208,250 25,750 93,500 45,250	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 65,000 28,000 0 0 0 0 200,250 200,250 202,250 25,750 33,500 45,250
Water String Surface Crising Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tubbing Wellbeak, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Life Enginent Surface Equipment Well Automation Materials Cost Tangbe - Well Enginent Other Langer, Statis Sattery Equipment Tanks, Tanks Steps, Stairs Battery Equipment Soverhead Power Distribution Facility Bectrical Telecommunication Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20 CONTA25 CONTA26 CONTA45	0 208,250 25,750 93,500 45,250 0 46,500	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 67,000 28,000 60,000 59,000 298,250 0 208,250 25,750 93,500 45,250
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Tie-Back Tutsing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Surface Equipment Total Tangbio - Well Equipment Cost N/C Lease Equipment Tanks, Tanks Staps, Stairs Battery Equipment Socondary Containments Overhead Power Distribution Facility Electrical Telecommunication Equipment Meters and Metering Equipment Meters and Metering Equipment Meters and Metering Equipment Meters and Metering Equipment	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONT.405 CONT.410 CONT.415 CONT.420 CONT.425 CONT.426 CONT.445 CONT.450	0 208,250 25,750 93,500 45,250 0 46,500 28,750	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 65,000 67,000 28,000 59,000 0 895,000 202,250 0 208,250 0 45,250 0 46,500
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tiel-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbie-Well Equipment Cost NI/C Lease Equipment Secondary Containments Overhead Power Distribution Facility Liner Distribution Facility Liner Distribution Facility Line Pipe Lease Automation Materials	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONT.405 CONT.410 CONT.415 CONT.420 CONT.425 CONT.426 CONT.445 CONT.450 CONT.455	0 208,250 25,750 93,500 45,250 0 46,500 28,750 43,750	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 0 82,000 65,000 67,000 28,000 0 90,250 204,250 25,750 93,500 45,250 46,500 28,750 44,500 28,750 44,500 48,500 48,750
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tice-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbie - Well Equipment Cort NIX Lease Equipment Statist Equipment Secondary Containments Overhead Powar Distribution Facility Hectrical Telecommunication Equipment Meters and Metering Equipment Meters and Metering Equipment Meters and Metering Equipment Meters and Metering Equipment Eases Automation Materials FL/GL - Materials	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONT.405 CONT.410 CONT.415 CONT.420 CONT.425 CONT.426 CONT.445 CONT.450 CONT.455 CONT.550	0 208,250 25,750 93,500 45,250 0 46,500 28,750 43,750 39,000	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 0 20,000 65,000 67,000 28,000 0 60,000 59,000 208,250 0 208,250 25,750 93,500 45,250 0 46,500 28,750 45,500 39,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Casing or Liner Production Tie-Back Tuking Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Surface Equipment Total Tangbie - Well Equipment Con N/C Lease Equipment Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments Overhead Powar Distribution Facility Hectrical Telecommunication Equipment Meters and Metering Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Line Pipe	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20 CONTA25 CONTA26 CONTA45 CONTA50 CONTA55 CONT.550 CONT.555	0 208,250 25,750 93,500 45,250 0 46,500 28,750 43,750 39,000 164,250	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 0 82,000 65,000 67,000 28,000 0 90,250 204,250 25,750 93,500 45,250 46,500 28,750 44,500 28,750 44,500 48,500 48,750
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Tie-Back Tubing Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Well Automation Materials Total Tangbio-Well Equipment Cost NIC Lease Equipment Secondary Containments Battery Equipment Secondary Containments Overhead Powar Distribution Facility Hectrical Telecommunication Equipment Meters and Metering Equipment Meters and Metering Equipment Facility Hectrical Telecommunication Equipment Meters and Metering Equipment Facility Hectrical	DWEB.195 DWEB.140 DWEB.145 DWEB.155 DWEB.160 DWEB.115 DWEB.115	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20 CONTA25 CONTA25 CONTA26 CONTA55 CONTA55 CONTA55 CONTA55 CONT.550 CONT.555	0 208,250 25,750 93,500 45,250 0 46,500 28,750 43,750 39,000	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 0 20,000 65,000 67,000 28,000 0 60,000 59,000 208,250 0 208,250 25,750 93,500 45,250 0 46,500 28,750 45,500 39,000
Water String Surface Cessing Intermediate Casing 1 Intermediate Casing 2 Drilling Liner Production Casing or Liner Production Casing or Liner Production Tie-Back Tuking Wellhead, Tree, Chokes Liner Hanger, Isolation Packer Packer, Nipples Pumping Unit, Engine Downhole Lift Equipment Surface Equipment Surface Equipment Total Tangbie - Well Equipment Con N/C Lease Equipment Tanks, Tanks Steps, Stairs Battery Equipment Secondary Containments Overhead Powar Distribution Facility Hectrical Telecommunication Equipment Meters and Metering Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Line Pipe	DWEB.135 DWEB.140 DWEB.145 CWEB.155 DWER.160 DWEB.155 DWER.160	13,000 000000000000000000000000000000000	DWEA.165 DWEA.120	0 20,000 67,000	STIMT.105 STIMT.120 STIMT.400 STIMT.405	25,000 28,000 0 60,000	CONTA05 CONTA10 CONTA15 CONTA20 CONTA25 CONTA26 CONTA45 CONTA50 CONTA55 CONT.550 CONT.555	0 208,250 25,750 93,500 45,250 0 46,500 28,750 43,750 39,000 164,250	PCOMT.400 PCOMT.405 PCOMT.416 PCOMT.420	0 0 0 59,000	50,000 307,000 0 164,000 0 20,000 65,000 67,000 28,000 0 60,000 59,000 208,250 0 208,250 25,750 93,500 45,250 0 46,500 28,750 45,500 39,000

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1	(MARK)	BCP - Drilling	Herschiller Herschiller		ACP - Drilling			Comp/Stim	
Description	Codes	1	Amount	Codes		Amount	Codes STIM.100	ļ	Amoun
Roads & Location	DIDC.100		140,000	i			2111/1/100		10,000
Damages	1	i	6,000		1		STIM.255		F2.000
Mud/Fluids Disposal  Day Rate	DIDC.255	20 does at \$25 000 the	145,000	DEC 130	4 days at \$25,000/day	100,000	31IM.233	1	53,000
Misc Preparation	DIDC.120	20 days at \$25,000/day	525,000 35,000	DICCIZE	4 days at 323,000/00y	100,000		1	1
Bits	DIDC.125	1	85,000	DICC.125	i	. 0	STIM.125	1	1 ,
Fuel	1	1,150 gal/day at \$3.00/gal	86,000	5	!	0			1
(Water for Drilling Rig (Not Frac Water)	DIDC.140	, <b>,</b> , , ,	5,000			0	5TIM.135		24,000
Mud & Additives	DIDC,145		187,000	2		1		i	2-7000
SWD PIPED TO XEC SWD WELL	1		107,000	1					
SWD PIPED TO 3RD PARTY SWD WELL		I			1				
SWD HAULED TO XEC SWD WELL	į	ļ	1	i					
SWD HAULED TO 3RD PARTY SWD WELL	1	1	1	1				•	
Surface Rentals	DIDC.150	Per Day (BCP)/day	120,000	DICC.140		0	STIM,140		237,000
Dawnhole Rentals	DIDC.155		145,000				STIM,145	2	1
Flowback Labor	1				1		STB4.141	1	1 0
Automation Labor	Š	İ							
Formation Evaluation (DST, Coring, etc.)	DIDC,160		0		1		STIM,150	1	
Mud Logging	DIDC.170	16 days at \$1,200/day	24,000						
Open Hole Logging	DIDC.180	1	0		1				
Cementing & Float Equipment	DIDC,185	:	144,000	DICC.155		67,000			
Tubular Inspections	DIDC.190		20,000	DICC.160	i	5,000	STEAL 160	:	2,000
Casing Crevs	DIDC.195		30,000	DICC.165		13,000	STIM, 165	· · · · · · · · · · · · · · · · · · ·	0
Mechanical Labor	DIDC.200		15,000	DICC.170	!	10,000	STIM.170		0
Trucking/Transportation	DIDC.205	<u>.</u>	10,000	DICC.175		8,000	STIM.175		4,000
Supervision	DIDC.210	i i	104,000	DICC.180	i	16,000	STIM.180		94,000
Trailer House/Camp/Catering	DIDC 280		45,000			6,000	STIM.280	1	67,000
Other Misc Expenses	DIDC.220	· · · · · · · · · · · · · · · · · · ·	5,000		i	0	STIML190		0
Overhead	DIDC.225	1	10,000	DICC.195		5,000			
Remedial Cententing	DIDC.231		0		i		STIM.215	1	0
MOB/DEMOB	DIDC.240		150,000						
Directional Drilling Services	DIDC.245		377,000					4	
Solids Control	DIDC.260		66,000					9	
Well Cantral Equip (Snubbing Services)	DIDC.265		77,000			5,000	STIM.240	1	109,000
FishIng & Sidetrack Services	DIDC.270		0	DICC,245		0	STIM,245		0
Completion Rig							STIM.115		21,000
Call Tubing Services							STIM.260		448,000
Completion Logging/Perforating/Wireline							STIM,200		476,000
Camposite Plugs							STIM.390	5	108,000
Stinulation							STIM.210		2,733,000
Stimulation Water/Water Transfer/Water							STIM,395	1	486,000
Cimarex Owned Frac/Rental Equipment							STIM.305		40,000
Legal/Regulatory/Curative	DIDC,300		10,000						
Well Control Insurance	DIDC.285	\$0.35/h	7,000						
Major Construction Overhead								Į.	
Real Time Operations Center	DIDC.560		0		i		STIM.560		0
FL/GL - Labor			1		ſ.			!	
FL/GL - Supervision									
Survey									
SWD/Other - Labor									
SWD/OTHER - SUPERVISION						-			
Cantingency	DIDC.435	500 % of Drilling Intangibles	129,000	DICC.220		12,000	ST1M.220		246,000
Contingency								i	
P&A Costs	DIDC.295		0	DICC.275		0			
Total intangible Cost			2,702,000	///em//em/	and the second resemble to the second	247,000	p. 45 5 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		5,158,000
Drive Pipe	OWEB.150		0						
Conductor Pipe	DWEB.130		0						
Water String	DWEB. 135		13,000			1			
Surface Casing		9 5/8" - 2,070ft at \$24.00/ft	50,000						
Intermediate Casing 1		7" - 9,770ft at \$29.00/ft	307,000		į				
Intermediate Casing 2	DWEB.155		0						
Orilling Liner	DWEB.160		0						
Production Casing or Liner					4 1/2" - 12,590ft at \$13.00/ft	164,000	******		
Production Tie-Back				DWEA.165		0	STIMT.101		0
Tubing								3-1/2-* - 8,150ft at \$10,00/ft	82,000
Wellhead, Tree, Chokes	DWEB.115			DAVEA 120		20,000	STEMT,120	1	25,000
Liner Hanger, Isolation Packer	DWE9.100	).	0	DWEA.125		67,000	CT# ** · · ·		
Packer, Nipples			i			1	STIMT.400	i	28,000
Pumping Unit, Engine	i						STIMT 410		0
Downhole Lift Equipment			1		i		STIMITA10		60,000
Surface Equipment			1						
Well Automation Materials		ann				754.000	4. yl m		****
Total Tangible - Wall Equipment Cost	///····	CONTRACTOR COMMONWEADORS AND AND AND AND AND AND AND AND AND AND	390,000		ing grander mengapangang ang pagangan ang pa	251,000	erenne dan ne		195,000
N/C Lease Equipment			1						
		5							
Tonks, Tanks Steps, Stairs		1	1			-			
Battery Equipment					-				
Battery Equipment Secondary Containments		N.				ļ			
Battery Equipment Secondary Containments Overhead Power Distribution		3							
Battery Equipment Secondary Containments Overhead Power Distribution Facility Electrical		,				î			
Battery Equipment Secondary Containments Overhead Power Distribution Facility Electrical Yelecommunication Equipment						Company			
Battery Equipment Secondary Containments Ovurhead Power Distribution Facility Electrical Telecommunication Equipment Meters and Metering Equipment						Commence of the same			
Battery Equipment Secondary Containments Ovarhead Power Distribution Facility Electrical Telecommunication Equipment Neters and Metering Equipment Facility Line Pipe			and track to proper the state of the state o			Committee and the committee an			
Battery Equipment Secondary Containments Overhead Power Distribution Facility Electrical Telecommunication Equipment Metters and Metering Equipment Facility Line Pipe Lease Automation Naterials						e de la companya de l			
Battery Equipment Secondary Containments Ovurhead Power Distribution Facility Electrical Telecommunication Equipment Neters and Metering Equipment Facility Line Pipa Lease Automation Naterials FL/GL – Materials						Commission is a second property of the propert			
Battery Equipment Secondary Containments Ovurhead Power Distribution Facility Electrical Telecommunication Equipment Neters and Metering Equipment Facility Line Pipa Lease Automation Materials FL/GL - Materials FL/GL - Line Pipa			ш фина парамена депарамена депарамена						
Battery Equipment Secondary Containments Ownthead Power Distribution Facility Electrical Telecommunication Equipment Meters and Metering Equipment Facility Line Pipe Lease Automation Materials FL/GL - Materials FL/GL - Materials SWD/Other - Materials						State da de la casa de de de de de de de de de de de de de			
Battery Equipment Secondary Containments Ovurhead Power Distribution Facility Electrical Telecommunication Equipment Neters and Metering Equipment Facility Line Pipa Lease Automation Materials FL/GL - Materials FL/GL - Line Pipa									



Z9H	Production Freign	80499444		Post Completion	148618	Total
Description	Production Equip Codes	Amount	Codes	- rost competion	Amoun	A
Roads & Location	CON.100	9,000	PCOM.100	Ped/road dean up	28,000	187,000
Damages	CON.105	9,500				15,500
Ntud/Fluids Disposal	-		PCOM.255	\$0.25/bbl for 60 days using Da Vinci 7-18 9H	60,638	
Oay Rate			4			625,000
Misc Preparation			DCOL4135			35,000
Bits			PCOM.125			§ 1000 000 000 000 000 000 000 000 000 0
Fuel		i	PCOM.135			
Water for Drilling Rig (Not Frac Water) Mud & Additives	and the state of t		, reductor			187,000
SWD PIPED TO XEC SWD WELL			PCOM:254		C	
SWO PIPED TO 3RD PARTY SWD WELL			PCOM.257			
SWD HAULED TO XEC SWD WELL			PCOM.258		0	
SWD HAULED TO 3RD PARTY SWD WELL			PCOM.259		0	C
Surface Rentals	CON.140	6,000	PCOM,140	Flowback iron, manifold, half-pit tank, pipe	30,900	393,900
Downhole Rentals	1		PCOM.145		0	145,000
Flowback Labor			PCOM.141	\$2,000/day for 14 days	28,000	
Automation Labor	CON.150	43,250	PCOM:150		0	43,250
Formation Evaluation (DST, Coring, etc.)			}			0 0
Mud Logging			1			24,000
Open Hole Logging						211,000
Cementing & Float Equipment			PCOM.160		0	3
Tubular Inspections Casing Crews	i	ì	T COM. 100			43,000
Mechanical Labor	CON.170	187,000	PCOM.170		0	
Trucking/Transportation	CON.175	25,000				
Supervision	CON.180	19,000			0	233,000
Trailer House/Camp/Catering			į			118,000
Other Misc Expenses	CON.190	24,000	PCOM.190		0	
Overhead						15,000
Remedial Cementing			PCOM.215	ļ	0	62
MGB/DEMG8						150,000
Directional Drilling Services		1				377,000
Solids Cantrol						66,000
Well Control Equip (Snubbing Services)			PCOM:240		0	191,000
Fishing & Sidetrack Services	İ	1	PCOM.245		0	
Completion Rig	:		PCOM.115		0	
Coil Tubing Services			PCOM.200		0	448,000
Completion Logging/Perforating/Wireline			PCOM.390		0	476,000 108,000
Composite Plugs Stimulation Pumping/Chemicals/Additives/Sand			PCOM.210		0	
Stimulation Water/Water Transfer/Water			i resiliero		ŭ	486,000
Cimarex Owned Frac/Rental Equipment			PCOM.305		0	40,000
Legal/Regulatory/Curative	CON-300	0				10,000
Well Control Insurance		1				7,000
Major Construction Overhead	CON.305	38,750				38,750
Real Time Operations Center		1				0
FL/GL - Labor	CON.500	352,750				352,750
FL/GL - Supervision	CON.SOS	44,000				44,000
Survey	CON.515	5,000				5,000
SWD/Other - Labor	CON.600	0				0
SWD/OTHER - SUPERVISION	CON.605 CON.220	106,000	PCOM 220	10%	8,690	501,690
Contingency	CON.221	61,500	redivited	102	4,030	61,500
Contingency P&A Costs	CONZE	01,500				01,500
Total Intangible Cost		930,750			156,228	9,193,978
Drive Pipe	The state of the s	Candy Cape			The second secon	0
Conductor Pipe						0
Water String		1				13,000
Surface Casing						50,000
Intermediate Casing 1						307,000
Intermediate Casing 2	Your see					٥
Drilling Liner	,					0
Production Casing or Uner				ļ		164,000
Production Tie-Back	***		PCOMT.105		اء	82,000
Tubing			PCOMT.105		0	65,000
Wellhead, Tree, Chokes Liner Hanger, Isolation Packer			, comi, 120		U,	67,000
Packer, Nipples		1	PCOMT.400		0	28,000
Pumping Unit, Engine			PCOMTA05	1	0	0
Downhole Lift Equipment		-	PCOMT.410		0	60,000
Surface Equipment	4			XEC owned material transferred sand	59,000	
Well Automation Materials			PCOMT.455		0	0
Total Tang ble - Well Equipment Cost		1			59,000	895,000
N/C Lease Equipment	CONT.400	208,250				208,250
Tanks, Tanks Steps, Stairs	CONT.405	0				O
Battery Equipment	CONT.410	208,250				208,250
Secondary Containments	CONT.415	25,750				25,750
Overhead Power Distribution	CONT.420	93,500		1	-	93,500
Facility Electrical	CONT.425	45,250		Į		45,250
Telecommunication Equipment	CONT.426	45 500		1	į	0
Meters and Metering Equipment	CONT.445 CONT.450	46,500 28,750			1	46,500 28,750
Facility Line Pipe	CONT.450	28,750 43,750				43,750
Lease Automation Materials FL/GL - Materials	CONT.550	39,000				39,000
FL/GL - Materials FL/GL - Line Pipe	CONT.555	164,250			200	164,250
SWD/Other - Materials	CONT.650	0			1	0
SWD/OTHER - LINE PIPE	CONT.655	0				0
Total Tangible - Lease Equipment Cost	and an experience of the second secon	903,250				903,250
	The state of the s	1,834,000			242 424	10,992,228

#### **Communication Timeline**

10/9/2019 – Proposals for both the Da Vinci 7-18 Federal Com 29H & 30H sent

10/12/2019 – Proposals received by TLW Investments, LLC, Attn: Thad Montgomery

**10/23/2019** – Received an email from Mr. Montgomery indicating that the acreage was sold to Brigham several years ago and that all well proposals should be sent to Brigham

11/14/2019 – XEC was informed by Brigham that they did not have record of acquiring TLW's interest in the E/2 of Section 18. Brigham's records reflected that they acquired only the SW/4 of Section 18. I then reached out to TLW. TLW confirmed that they do still own the interest in the E/2 of Section 18. I then sent the proposals to TLW again and informed them that we would be filing for force pooling. TLW indicated that they would go Non-Consent unless we were willing to purchase. I then requested the form they would require to use in order to sell to XEC.

**11/26/2019** - – I followed up with Thad Montgomery at TLW to understand the need to use their specific "sublease" form

**12/3/2019** – Landman from TLW indicated that they prefer to use the sublease form as previously provided. We could not agree to a form of assignment.

# 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. 20992** 

#### AFFIDAVIT OF HARRISON HASTINGS

STATE OF TEXAS	)
	) ss
COUNTY OF MIDLAND	)

Harrison Hastings, being duly sworn, deposes and states:

- 1. I am over the age of 18, I am a geologist for Cimarex Energy Co. ("Cimarex"), and have personal knowledge of the matters stated herein. I have been qualified by the Oil Conservation Division ("Division") as an expert in petroleum geology matters.
- 2. I conducted a geological study of the area that encompasses the horizontal spacing unit that is the subject of Cimarex's application in this case and am familiar with the geological matters involved in this case.
- 3. As part of my study, I have prepared the following geological exhibits with respect to the horizontal spacing unit that are attached hereto:
  - a. Exhibit C.1 is a Gunbarrel/Lateral Trajectory Diagram. This diagram identifies the DaVinci 7-18 E/2 development plan, which includes the Da Vinci 7-18 Fed Com
     29H well, the proposed well within the Wolfcamp horizontal spacing unit that is the subject of this case, and the Da Vinci 7-18 Fed Com 30H well.

- b. Exhibit C.2 is a Locator Map identifying the DaVinci 7-18 E/2 project area, in proximity to the Capitan Reef, for the Wolfcamp horizontal spacing unit that is the subject of this application.
- c. Exhibit C.3 is a Cross-Section Locator Map. This map identifies the cross-section running from A-A' with the cross-section well names and a blue dotted line in proximity to the proposed DaVinci 7-18 E/2 wells. It also identifies the sections in which the cross-section wells are located.
- d. Exhibit C.4 is a Deep Structure Map on the top of the Wolfcamp formation. This map identifies the proposed Da Vinci 7-18 Fed Com 29H well with a red line. It also identifies the location of the cross-section running from A-A' with a blue dotted line. This map shows that the structure dips to the east.
- e. **Exhibit C.5** is a Lower Wolfcamp Isopach Map. It shows that the formation is relatively uniform across the proposed unit. It also shows the location of cross-section A-A' in proximity to the proposed well.
- f. Exhibit C.6 is a Stratigraphic Cross Section hung on the top of the Wolfcamp formation. The well logs on the cross-section give a representative sample of the Wolfcamp formation in the area. The target zone for the well is the Wolfcamp C Shale, and that zone is consistent across the unit. The planned well-path for this well is indicated by a blue dashed line, and the letters 'LZ'.
- g. Exhibit C.7 is a detailed view of the Target Zone within Stratigraphic Cross Section hung on the top of the Wolfcamp Fm. The target zone for the well is the Lower Wolfcamp C Shale and is identified in bright teal, and that zone is consistent across the unit.

- h. **Exhibit C.8** is a Well Bore Diagram for the proposed well in the above referenced case. It shows the well's TVD and setback from the proposed unit boundary.
- 4. Based upon my study as illustrated in these exhibits, knowledge of the geology in this area, and education and training, it is my expert opinion that:
  - a. The horizontal spacing unit is justified from a geologic standpoint.
  - b. There are no structural impediments or faulting that will interfere with horizontal development.
  - c. Each quarter section in the unit will contribute more or less equally to production.
- 5. The preferred well orientation in this area is either N-S or E-W. This is due to the fact that regional max horizontal stress orientation in this area is approximately N45E.
- 6. The producing interval for each of these wells will be orthodox and will comply with the Division's set back requirements.
- 7. I attest that the information provided herein is true, correct and complete to the best of my knowledge and belief.