

PERMIAN BASIN FEE LEASE RIGHTS – NAPE 2021

T 22S R 27E §20 – Eddy County, New Mexico T 24S R 33E §13 – Lea County, New Mexico

Net Mineral Acreage: 40 +/-

Term: 3 Years *

Depth: Various

NRI (Delivered): 75%

Bonus: \$TBD Per Net Mineral Acre

This offer is subject to prior sale or withdrawal without prior notice.

Contact: Shane Spear

 $\underline{Shane@SpearBrothersGroup.com}$

Spear Brothers Group, LLC

PO Box 1684

Midland, Texas 79702 (432) 683-8420 (work) (432) 559-8097 (cell)



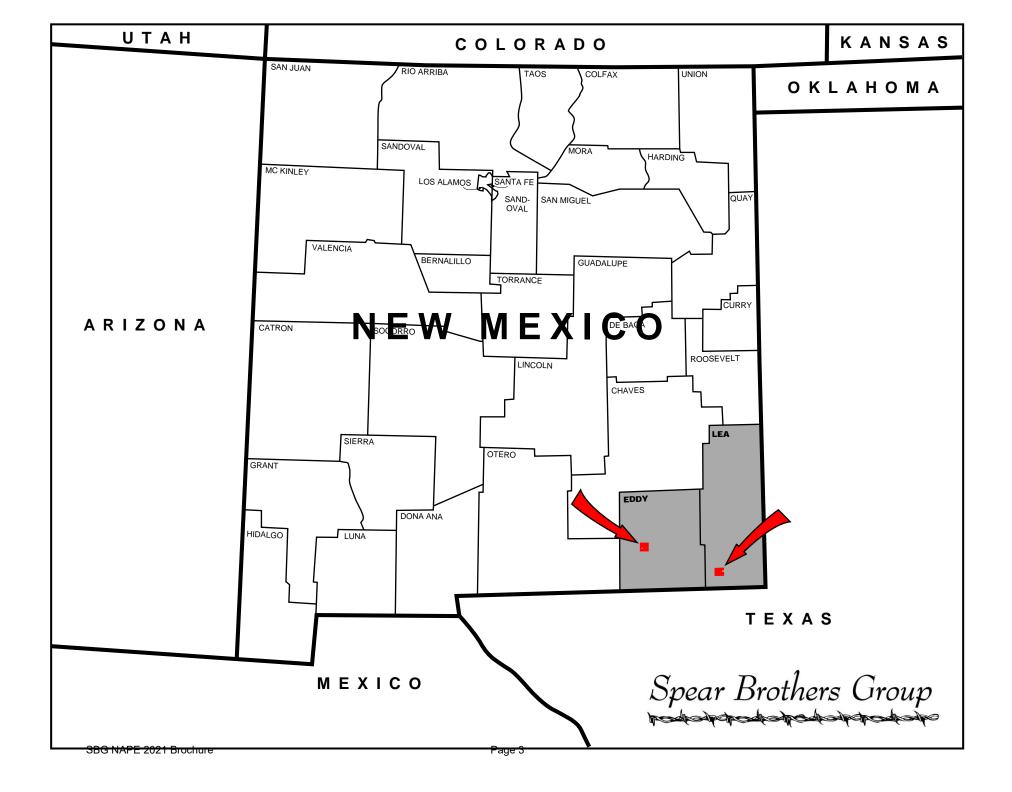
www.SpearBrothersGroup.com

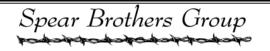


^{*} These are fee minerals available for lease. In order to complete a drilling project, it is probable that lessees will need to obtain permissions from state and federal authorities who have shown hostility to drilling activities. The ability to get government permissions to drill are subject to the whims and fancies of those capricious state and federal governments.

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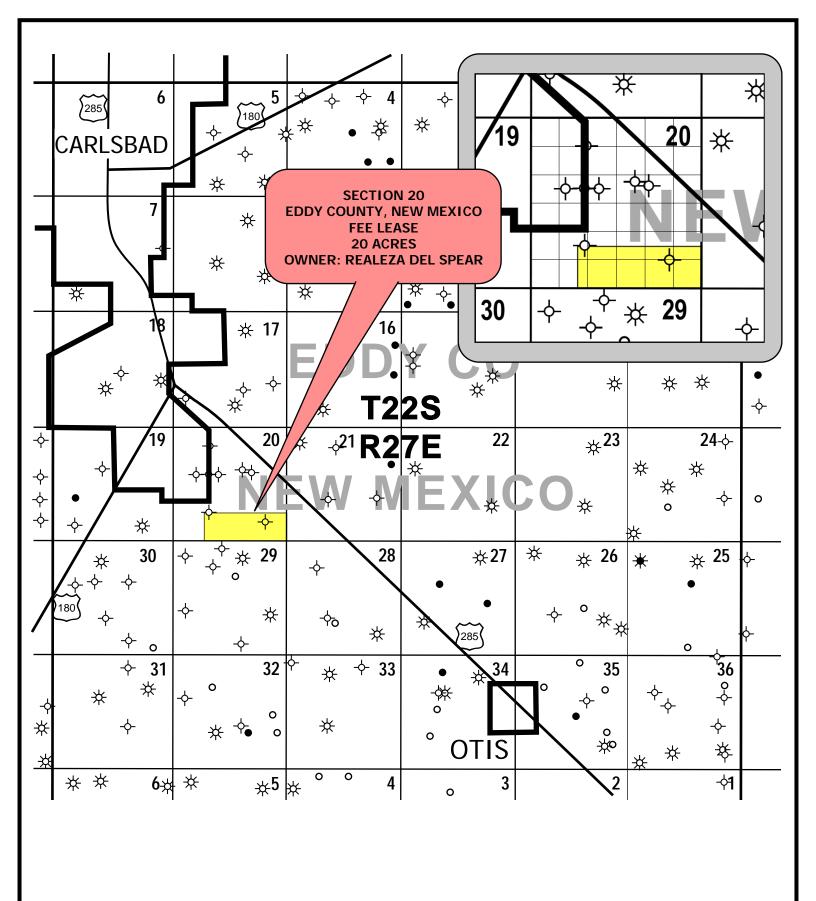


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Southeast New Mexico Leasing Rights

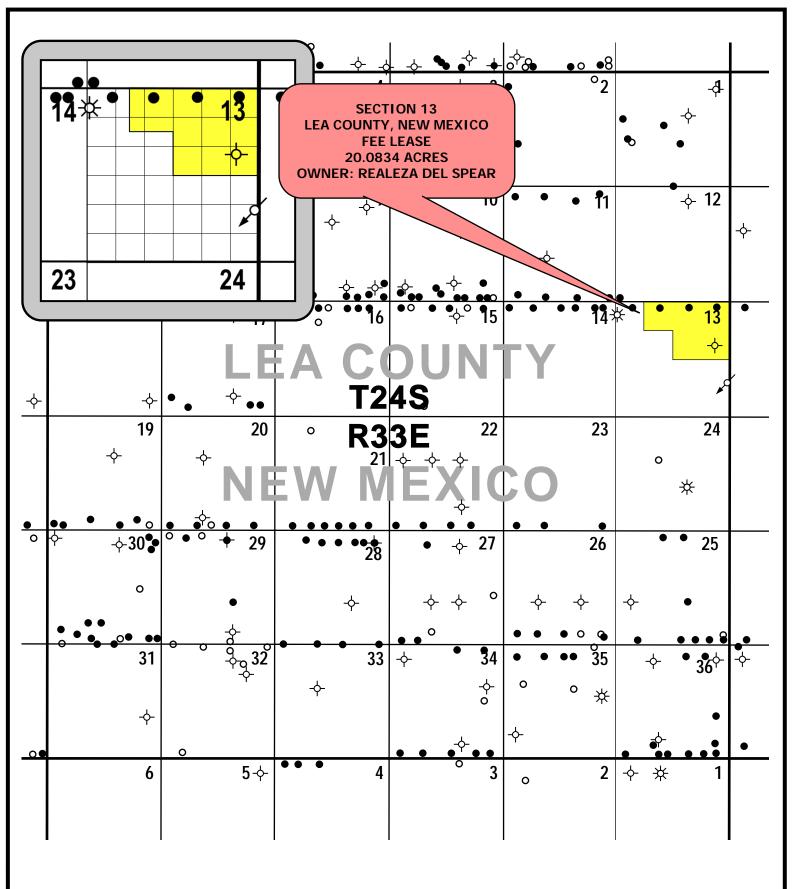
County	Township	Range	Section	Gross Acres	Net Acres	Depth Available
Eddy	22S	27E	20	120	20	All Depths
Lea	24S	33E	13	240	20.0834	SOLD! Wolfcamp

TOTAL ACRES 40.0834





Spear Brothers Group





Spear Brothers Group

THIS AGREEMENT made this lessor (whether one or more) and

1. Lessor, in consideration of TEN AND OTHER DOLLARS in hand paid, receipt of which is here acknowledged, and of the royalties herein provided and of the agreements of the lessee herein contained, hereby grants, leases and lets exclusively unto lessee for the purpose of investigating, exploring, prospecting, drilling, and operating for and producing oil and gas, injecting gas, waters, other fluids, and air into subsurface strata laying pipelines, storing oil, building tanks, roadways, telephone lines, and other structures and things thereon to produce, save take care of, treat, process, store and transport said minerals, the following described land in County, New Mexico, to-wit:

Said land is estimated to comprise gross acres net mineral acres, whether it actually comprises more or less.

- 2. Subject to the other provisions herein contained, this lease shall remain in force for a term of three (3) years from this date (called "primary term") and as long thereafter as oil or gas is produced in paying quantities from said land or from land with which said land is pooled.
- The royalties to be paid by lessee are: (a) on oil, and other liquid hydrocarbons saved at the well, 25% of that produced and saved from said land same to be delivered at the wells or to the credit of lessor in the pipeline to which the wells may be connected: (b) on gas, including casinghead gas or other gaseous substance produced from said land and used off the premises or used in the manufacture of gasoline or other products, the market value at the well of 25% of the gas used, provided that on gas sold on or off the premises, the royalties shall be 25% of the amount realized from such sale: (c) and at any time when this lease is not validated by other provisions hereof and there is a gas and/or condensate well on said land, or land pooled therewith, but gas or condensate is not being so sold or used and such well is shut-in, either before or after production therefrom, then on or before 90 days after said well is shut in, and thereafter at annual intervals, lessee may pay or tender an advance shut-in royalty equal to \$1.00 per net acre of lessor's gas acreage then held under this lease by the party making such payment or tender, and so long as said shut-in royalty is paid or tendered, this lease shall not terminate and it shall be considered under all clauses hereof that gas is being produced from the leased premises in paying quantities. Each such payment shall be paid or tendered to the party or parties who at the time of such payment would be entitled to receive the royalties which would be paid under this lease if the well were in fact producing. The payment or tender of royalties or shut-in royalties may be made by check or draft. Any timely payment or tender of shut-in royalty which is made in a bona fide attempt to make proper payment, but which is erroneous in whole or in part as to parties or amounts, shall nevertheless be sufficient to prevent termination of this lease in the same manner as though a proper payment had been made if lessee shall correct such error within 30 days after lessee has received written notice thereof by certified mail from the party or parties entitled to receive payment together with such written instruments (or certified copies thereof) as are necessary to enable lessee to make proper payment. The amount realized from the sale of gas on or off the premises shall be the price established by the gas sales contracted entered into in good faith by lessee and gas purchaser for such term and under such conditions as are customary in the industry. "Price" shall mean the net amount received by lessee after giving effect to applicable regulatory orders and after application of any applicable price adjustments specified in such contract or regulatory orders.
- 4. This is a paid-up lease and lessee shall not be obligated during the primary term hereof to commence or continue any operations of whatsoever character or to make any payments hereunder in order to maintain this lease in force during the primary term: however, this provision is not intended to relieve lessee of the obligation to pay royalties on actual production pursuant to the provisions or paragraph 3 hereof.
- Lessee is hereby granted the right and power, from time to time, to pool or combine this lease, the land covered by it or any part or horizon thereof with any other land, leases, mineral estates or parts thereof for the production of oil or gas. Spacing units pooled hereunder shall not exceed the spacing unit fixed by law, from time to time during the term hereof, or by the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico or by any other lawful authority for the pool or area in which said land is situated, plus a tolerance of ten percent (10%). Lessee shall file written unit or project area designations in the county in which the premises are located and such units may be designated from time to time and either before or after the completion of wells. Operations (including, but not limited to, drilling operations) on or production from any part of any such unit or project area shall be considered for all purposes, except the payment of royalty, as operations conducted upon or production from the land described in this lease, including, for a horizontal well, those cases in which the location of the well site tract for such well is not located on the leased premises or on any other lands included within the project area for such well. There shall be allocated to the land covered by this lease included in any such unit or project area that portion of the total production of pooled minerals from wells in the unit or project area, after deducting any used in lease or unit (or project area) operations, which the net oil or gas acreage in the land covered by this lease included in the unit bears to the total number of surface acres in the unit or project area. The production so allocated shall be considered for all purposes, including the payment or delivery of royalty, to be the entire production of pooled minerals from the portion of said land covered hereby and included in said unit in the same manner as though produced from said land under the terms of this lease. Any pooled unit designated by lessee, as provided herein, may be amended or dissolved by Lessee, in whole or in part, at any time and from time to time, by recording an appropriate instrument in the County where the land is situated. As used in this lease, the term "horizontal well" shall mean a well containing a single lateral that is drilled in a manner in which the horizontal component of the completion interval extends at least one hundred (100) feet in the objective formation and which exceeds the vertical component of the completion interval in the objective formation. A horizontal well may have more than one lateral as long as each lateral component meets the above requirements for a single lateral. As used in this lease, the term "lateral" shall mean that portion of the well bore that deviates from approximate vertical orientations to approximate horizontal orientation and the remainder of the well bore beyond such deviation to the end of the well bore. A "vertical well" is a well other than a horizontal well.
- 6, If at the expiration of the primary term there is no completed well upon said land capable of producing oil or gas, but lessee has commenced operations for drilling or reworking thereon, this lease shall remain in force so long as operations are prosecuted with no cessation of more than 90 consecutive days which operations must include completion of any drilled and uncompleted well, whether such operation be on the same well or on a different or additional well or wells, and if they result in the production of oil or gas, so long thereafter as oil or gas is produced from said land. If, after the expiration of the primary term, all wells upon said land should become incapable of producing for any cause, this lease shall not terminate if lessee commences operations for additional drilling or for reworking within 90 days thereafter. If any drilling, additional drilling, or reworking operations hereunder result in production, then this lease shall remain in full force so long thereafter as oil or gas is produced hereunder.
- 7. Lessee shall have free use of oil, gas and water from said land, except water from lessor's wells and tanks, for all operations hereunder, and the royalty shall be computed after deducting any so used. Lessee shall have the right at any time during or after the expiration of this lease to remove all property and fixtures placed by lessee on said land, including the right to draw and remove all casing. When required by lessor, lessee will bury all pipelines on cultivated lands below ordinary plow depth and no well shall be drilled within two hundred feet (200 ft.) of any residence or barn now on said land without lessor's
- 8. The rights of either party hereunder may be assigned in whole or in part and the provisions hereof shall extend to their heirs, executors, administrators, successors and assigns: but no change in the ownership of the land or in the ownership of, or rights to receive, royalties or shut-in royalties, however accomplished shall operate to enlarge the obligations or diminish the rights of lessee: and no such change or division shall be binding upon lessee for any purpose until 30 days after lessee has been furnished by certified mail at lessee's principal place of business with acceptable instruments or certified copies thereof constituting the chain of title from the original lessor. If any such change in ownership occurs through the death of the owner, lessee may, at its option, pay or tender any royalties or shut-in royalties in the name of the deceased or to his setate or to his heirs, executor or administrator until such time as lessee has been furnished with evidence satisfactory to lessee as to the persons entitled to such sums. An assignment of this lease in whole or in part shall, to the extent of such assignment relieve and discharge lessee of any obligations hereunder and, if lessee or assignee of part or parts hereof shall fail or make default in the payment of the proportionate part of royalty or shut-in royalty due from such lessee or assignee or fail to comply with any of the provisions of this lease, such default shall not affect this lease insofar as it covers a part of said lands upon which lessee or any assignee thereof shall properly comply or make such payments.
- 9. Should lessee be prevented from complying with any express or implied covenant of this lease, or from conducting drilling or reworking operations

hereunder or from producing oil or gas hereunder by reason of scarcity or inability to obtain or use equipment or material, or by operation of force majeure, or by any Federal or state law or any order. rule or regulation of governmental authority, then while so prevented, lessee's duty shall be suspended, and lessee shall not be liable for failure to comply therewith: and this lease shall be extended while and so long as lessee is prevented by any such cause from conducting drilling or reworking operations or from producing oil or gas hereunder; and the time while lessee is so prevented shall not be counted against lessee, anything in this lease to the contrary notwithstanding.

- 10. Lessor hereby warrants and agrees to defend title to said land against all claims made by, through, or under Lessor but not otherwise, and agrees that lessee at its option may discharge any tax, mortgage or other lien upon said land and in the event lessee does so it shall be subrogated to such lien with the right to enforce same and to apply royalties and shut-in royalties payable hereunder toward satisfying same. Without impairment of lease's rights under warranty, if this lease covers a less interest in the oil or gas in all or any part of said land than the entire and undivided fee simple estate (whether lessor's interest is herein specified or not) then the royalties, shut-in royalty, and other payments, if any, accruing from any part as to which this lease covers less than such full interest, shall be paid only in the proportion which the interest therein, if any, covered by this lease, bears to the whole and undivided fee simple estate therein. Should any one or more of the parties named above as lessors fail to execute this lease, it shall nevertheless be binding upon the party or parties executing the same.
- 11. Lessee, it's or his successors, heirs and assigns, shall have the right at any time to surrender this lease, in whole or in part, to lessor or his heirs successors and assigns by delivering or mailing a release thereof to the lessor, or by placing a release thereof of record in the county in which said land is situated; thereupon lessee shall be relieved from all obligations, expressed or implied, of this agreement as to acreage so surrendered, and thereafter the shut in royalty payable hereunder shall be reduced in the proportion that the acreage covered hereby is reduced by said release
- 12. At the expiration of the Primary Term or at the conclusion of the continuous development program as hereinafter defined, whichever occurs later, this Lease shall terminate as to (1) all of the Leased Premises covered hereby except as to those lands which are included within the geographical boundaries of a pooled or communitized unit and/or spacing or proration unit established in conformity with field rules or spacing laws of the applicable governmental body on which there is located a well producing or capable of producing oil and/or gas in paying quantities; and (2) all depths 100' above and 100' below any formation producing in each pooled or communitized unit and/or proration unit. Lessee, at its option, may earn the lands outside the boundaries of a pooled or communitized unit and/or proration unit by commencing a continuous development program as defined herein. If, prior to the end of the Primary Term, Lessee has drilled and completed a well on the Leased Premises or lands pooled or communitized therewith either as a dry hole or as a well capable of producing oil and/or gas in paying quantities or has commenced operations for drilling or reworking on the Leased Premises or lands validly pooled or communitized therewith prior to the end of the Primary Term, then the commencement date of the continuous development program shall be one hundred eighty (180) days after the expiration date of the Primary Term or one hundred eighty (180) days after the completion of any well drilled across the expiration of the Primary Term of this Lease, and completed as a dry hole or a productive well, whichever is the later. Once the continuous development program has been commenced, this Lease shall remain in full force and effect as to the Leased Premises as long as Lessee, at its option, drills, or causes to be drilled, wells on the Leased Premises or lands pooled or communitized therewith without a lapse of more than one hundred eighty (180) days between the completion or abandonment of one well (such date of comple

Executed this day of but effective	
REALEZA DEL SPEAR, LP	
By: Shane Spear, Manager Spear Brothers Group, LLC General Partner of Realeza Del Spear, LP	
INDIVIDUAL ACKNOWLEDGMENT (New Mexico Short Form)	
STATE OF TEXAS	
COUNTY OF MIDLAND	
The foregoing instrument was acknowledged before me this day of 2021 a New Mexico Limited Liability Company, General Partner of Realeza Del Spear, LP, A Texas Limited	by Shane Spear, Manager, Spear Brothers Group, LLC d Partnership.
My Commission Expires	Notary Public

EXHIBIT "A"

Attached hereto and made a part of that certain Oil and Gas Lease by and between Realeza Del Spear, LP, Lessor and , Lessee, dated

- The royalties to be paid by Lessee are (a) on oil, and other liquid hydrocarbons saved at the well, twenty-five percent (25.00%) of that produced and saved from said land, same to be delivered at the wells or to the credit of Lessor in the pipeline to which the wells may be connected (b) on gas, including casinghead gas or other gaseous substances produced from said land and used off the premises or used in the manufacture of gasoline or other products, the market value at the well of twenty-five percent (25.00%) of the gas used provided that on gas sold on or off the premises, the royalties shall be twenty- five percent (25 .00%) of the amount realized from such sale, (c) and at any time when this Lease is not validated by other provisions hereof and there is a gas and/or condensate well on said land, or land pooled therewith, but gas or condensate is not being so sold or used and such well is shut-in, either before or after production there from, then on or before 90 days after said well is shut-in, and thereafter at annual intervals, Lessee may pay or tender an advance shut-in royalty equal to ten (\$10.00) dollars per net acre of Lessor's gas acreage then held under this Lease by the party making such payment or tender, and so long as said shutin royalty is paid or tendered, this Lease shall not terminate and it shall be considered under all clauses hereof that gas is being produced from the leased premises in paying quantities. Each such payment shall be paid or tendered to the party or parties who at the time of such payment would be entitled to receive the royalties which would be paid under this Lease if the well were in fact producing. The payment or tender of royalties and shut-in royalties may be made by check or draft. The amount realized from the sale of gas on or off the premises shall be the price established by the gas sales contract entered into in good faith by Lessee and gas purchaser for such term and under such conditions as are customary in the industry. "Price" shall mean the net amount received by Lessee after giving effect to applicable regulatory orders and after application of any applicable price adjustments specified in such contract or regulatory orders.
- 14. Shut-in royalty payments shall not serve to extend this Lease for a period in excess of two years beyond the date on which it is first paid.
- Notwithstanding any wording contained herein to the contrary, Lessee agrees that all royalties accruing under this lease shall be without deduction for the cost of producing, gathering, storing, separating treating, dehydrating, compressing, processing, transporting and otherwise making the oil, gas and other products produced hereunder ready for sale or use whether or not such costs are incurred either before or after the sale or use of production hereunder. The timely payment of royalties is a condition of this lease and shall be the individual obligation of Lessee, assuming the named operator and/or purchaser does not perform, and all royalties shall be paid commencing one hundred eighty (180) days after the last day of the month in which the initial sale of oil produced from the leased premises occurs, and all royalties shall be paid commencing one hundred eighty (180) days after the last day of the month in which the initial sale of gas produced from the leased premises occurs and thereafter on oil on or before sixty (60) days after the last day of each month during which oil is produced and on gas on or before sixty (60) days after the last day of each month during which gas is produced. Royalties or other payments out of production (or any portion thereof) shall not be considered wrongfully or unreasonably withheld if the same is withheld by virtue of or resulting from any law, order, directive or regulation of any governmental or regulatory body having jurisdiction or as the result of a bona fide title curative issue. In the event Lessee, or named operator and/or purchaser, should fail to make such timely payments of royalty, Lessor shall give Lessee notice in writing by certified mail of such mistake and Lessee has 45 days after receipt of notice by Lessor to correct said mistake by making payment of any royalties due and payable. Should such payment not be made within the time period so specified, then this Lease shall immediately terminate. Within 30 days of the termination of the Lease, Lessee must furnish to Lessor a fully executed and acknowledged release of this Lease as to the leased premises. Notwithstanding any wording contained herein to the contrary, Lessee agrees that all royalty payments to be paid to Lessor shall be paid based on the same price as that received by Lessee, including related or affiliated companies and parent or subsidiaries companies. Lessor's royalty shall be calculated free and clear of costs, expenses, and deductions for exploration, drilling, development and production, including, but not limited to, costs of dehydration, storage, compression, separation by mechanical means and stabilization of the hydrocarbons at the well, but shall bear its proportionate share of severance and other taxes based upon production and the actual, reasonable cost incurred by Lessee to transport, compress, stabilize, process or treat the production off the lease premises in order to make the production saleable, or in order to get the production to a market.
- 16. Lessee shall be solely responsible for all damage to property and injury to persons, including death, by reason of, or in connection with, its operations hereunder and does hereby agree to protect, save harmless, and indemnify Lessor from and against any and all claims and liability for damages to property and injuries, including death, to persons, including, but not limited to, Lessee's employees, agents, and contractors, such damages or injuries arising out of, or in connection with Lessee's operations hereunder, and Lessee shall, at Lessee's sole expense, handle all such claims, defend suits which may be brought against Lessor therein, pay all judgments rendered against Lessor therein, and reimburse Lessor for any expenditure which it may make on account thereof, unless such damage or injury is caused wholly or partially by Lessor's acts, omissions, or gross negligence.
- 17. Lessee agrees that it will reimburse Lessor for, and hold Lessor harmless from, all fines and penalties made or levied against Lessor by any governmental agency or authority as a result of, or in connection with, Lessee's use of the leased premises or of the facilities thereon or as a result of any release of any nature onto or under the ground, into the water or ground water, or into the air by Lessee from or upon the leased premises. Lessee also agrees that it will reimburse Lessor for, and hold Lessor harmless from, any and all costs and/or expenses, and attorney's fees and from all civil judgments or penalties incurred, entered, assessed, or levied against Lessor as a result of Lessee's use of the leased premises or as a result of any release of any nature onto or under the ground, or into the water or ground water, or into the air by the Lessee from or upon the leased premises. Such reimbursement or indemnification shall include, but not be limited to, any and all judgments or penalties to recover the cost of cleanup or any such release by Lessee from or upon the leased premises and all expense incurred by Lessor as a result of such civil action including but not limited to attorney's fees. The provisions of this Paragraph 17 shall apply regardless of

acquiescence or allegations thereof on the part of either party and shall apply notwithstanding any other provision of this agreement to the contrary.

18. This lease made without any warranties express or implied. In the event of conflict between the lease and this Exhibit, the Exhibit shall control.

End of Exhibit "A"

REALEZA DEL SPEAR, LP

Shane Spear, Manager, Spear Brothers Group, LLC General Partner Realeza Del Spear, LP



March 29, 2021

Realeza Del Spear PO Box 1684 Midland, TX 79702



Re:

The Dude 19/20 Fee 201H, 202H, 203H and 204H Participation Proposal All of Sections 19 and 20, Township 22 South, Range 27 East, Eddy County, New Mexico

Dear Sir/Madam:

Alpha Energy Partners, LLC ("AEP"), as Operator, hereby proposes the drilling of the The Dude 19/20 Fee 201H, 202H, 203H, and 204H, with productive laterals located in Sections 19 and 20, Township 22 South, Range 27 East, Eddy County, New Mexico, to the Wolfcamp Formation:

In connection with the above, please note the following:

- The estimated cost of drilling, testing, completing, and equipping each well is \$9,111,600 as shown on the enclosed AFE's dated March 22, 2021.
- The Dude 19/20 Fee 201H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,320' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,230' FNL, 550' FEL, or a legal location in Unit A of Section 24 of T22S-R26E, and a bottom hole location approximately 660' FNL, 200' FEL, or a legal location in Unit A of Section 20. The dedicated horizontal spacing unit will be the N/2N/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.
- The Dude 19/20 Fee 202H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,320' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,280' FNL, 550' FEL, or a legal location in Unit A of Section 24 of T22S-R26E, and a bottom hole location approximately 1,980' FNL, 200' FEL, or a legal location in Unit H of Section 20. The dedicated horizontal spacing unit will be the N/2S/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.
- The Dude 19/20 Fee 203H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,280' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,300' FSL, 500' FEL, or a legal location in Unit P of Section 24 of T22S-R26E, and a bottom hole location approximately 1,980' FSL, 200' FEL, or a legal location in Unit I of Section 20. The dedicated horizontal spacing unit will be the N/2S/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.

• The Dude 19/20 Fee 204H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,280' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,250' FSL, 500' FEL, or a legal location in Unit P of Section 24 of T22S-R26E, and a bottom hole location approximately 660' FSL, 200' FEL, or a legal location in Unit P of Section 20. The dedicated horizontal spacing unit will be the S/2S/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.

AEP reserves the right to modify the locations and drilling plans described above in order to address topography, cultural or environmental concerns, among other reasons. AEP will advise you of any such modifications.

AEP is proposing to drill the Well under the terms of the modified 1989 AAPL form of Operating Agreement which will promply be provided upon request. The Operating Agreement dated March 1, 2020, by and between Alpha Energy Partners, as operator and Oxy USA Inc. et al as Non-Operators covers All of Section 19 and All of Section 20, Township 22 South, Range 27 East, Eddy County, New Mexico and has the following general provisions: (JOA will be supplied upon request/participation)

- 100/300/300 Non-consenting penalty
- \$8,000/\$800 Drilling and Producing rate
- Alpha Energy Partners, LLC named as Operator

If you do not wish to participate in the Operation, AEP would like to discuss the Leasing of your mineral interest to AEP under the following terms:

- \$750/ac lease bonus;
- 3/16ths royalty rate;
- 3 year primary term, with 2 year option to extend, Paid Up;
- 90 day continuous development provision, and;
- Vertical pugh clause by deepest productive formation.

The above described Lease is enclosed in this mailing. If you do choose to lease you minerals, please execute the lease in front of a licensed public notary and return an original copy to my attention at the letterhead address. Upon recipt of your executed lease, AEP will promptly mail you your lease bonus. In that event, this Participation Proposal can be disregarded. Please note that all accepted lease proposals are subject to a full title review.

In the interest of time, if we do not reach an agreement within 30 days of the date of this letter, AEP will apply to the New Mexico Oil Conservations Division for compulsory pooling of your interest into a horizontal spacing unit for the proposed wells.

If you do not wish to lease your mineral interest, please indicate your participation elections in the spaces provided below, sign, and return (1) copy of this letteralong with a signed copy of the enclosed AFEs and a copy of your geologic requirements to my attention at the letterhead address or by email at travis@alphapermian.com. Thank you for your time and consideration, feel free to reach out if you have any questions.

Travis Macha Alpha Energy Partners, LLC Office: 508 W. Wall St., 12th Floor, Midland, Texas 79701 Mailing: P.O. Box 10701, Midland, Texas 79702 (O) 432-219-8855 (email) travis@alphapermian.com I/We hereby elect to participate in the The Dude 20/19 Fee 201H I/We hereby elect not to participate in the The Dude 20/19 Fee 201H I/We hereby elect to participate in the The Dude 20/19 Fee 202H I/We hereby elect not to participate in the The Dude 20/19 Fee 202H I/We hereby elect to participate in the The Dude 20/19 Fee 203H I/We hereby elect to participate in the The Dude 20/19 Fee 203H I/We hereby elect not to participate in the The Dude 20/19 Fee 203H
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I/We hereby elect <u>not</u> to participate in the The Dude 20/19 Fee 204H
Name/Company: By:
Title: Date:

Respectfully,

Well Name: The Dude 20/19	9 Fee 201H	Prospe	ct: Wolfca	mp Y Sand		
Location: SL: 1,230' FNL & 550'	FEL (24, T22S-R26E); BHL: 660' FNL & 200' FE	L (20) Co	unty Eddy			ST NM
Sec. 19-20 Blk:	Survey: TW	P: 22S	RNG: 2	7E Prop. TV	D: 8992	TMD: ####
IN.	TANGIBLE COSTS 0180		CODE	TCP	CODE	СС
Regulatory Permits & Surveys	TANGIBLE GOOTG GTGG		0190-0100	\$10,000	0190-0200	
Location / Road / Site / Preparation	on		0190-0104	\$85,000		\$25,000
Location / Restoration			0190-0105	\$150,000		\$30,000
Daywork / Turnkey / Footage Drill		00/d	0190-0111	\$592,000	0190-0211	\$87,600
Fuel 1700 gal/day @ 2.74/ga			0190-0115	\$152,000		\$350,000
Mud, Chemical & Additives			0190-0121	\$250,000	0190-0221 0190-0222	\$250,000
Horizontal Drillout Services Cementing	and the second s		0190-0126	\$100,000	0190-0222	\$30,000
Logging & Wireline Services			0190-0120	\$2,500	0190-0233	\$425,000
Casing / Tubing / Snubbing Services	Ce		0190-0136	\$20,000	0190-0236	\$90,000
Mud Logging			0190-0138	\$30,000	-	
Stimulation	50 Stg 20.4 MM gal / 20.4 MM lb				0190-0243	\$2,050,000
Stimulation Rentals & Other	THE STATE OF THE S				0190-0244	\$318,000
Water & Other			0190-0146	\$40,000	0190-0246	\$504,000
Bits			0190-0147	\$100,000 \$40,000		\$8,000 \$5,000
Inspection & Repair Services Misc. Air & Pumping Services			0190-0152 0190-0157	\$40,000	0190-0252	\$10,000
Testing & Flowback Services			0190-0157	\$15,000	0190-0259	\$30,000
Completion / Workover Rig			0.000100	\$10,000	0190-0262	\$10,500
Rig Mobilization		-	0190-0163	\$100,000		
Transportation	and the second s		0190-0166	\$30,000	0190-0266	\$20,000
Welding Services			0190-0167	\$5,000	0190-0267	\$15,000
Contract Services & Supervision			0190-0173	\$48,000	0190-0273	\$18,000
Directional Services	Includes Vertical Control		0190-0177	\$300,000		
Equipment Rental	and the second s		0190-0182	\$326,900		\$30,000
Well / Lease Legal			0190-0184	\$5,000		
Well / Lease Insurance	0.000		0190-0185	\$5,900		£10,000
Intangible Supplies			0190-0189 0190-0192	\$8,000 \$10,000	0190-0289 0190-0292	\$10,000
Damages ROW & Easements	and the second s		0190-0192	\$10,000	0190-0292	\$34,000
Pipeline Interconnect			0100 0100		0190-0294	\$88,000
Company Supervision			0190-0195	\$192,000		\$68,800
Overhead Fixed Rate			0190-0196	\$10,000	0190-0296	\$20,000
Well Abandonment			0190-0198		0190-0298	
Contingencies	2% (TCP) 2% (CC)		0190-0199	\$52,500	0190-0299	\$90,500
		TOTAL		\$2,679,800		\$4,617,400
	ANGIBLE COSTS 0181					
Casing (19.1" - 30")	4450L 40 0/01 54 57 L 55 OT 00 O 040 00	101	0191-0796	004 700		
Casing (10.1" - 19.0")	1450' - 13 3/8" 54.5# J-55 ST&C @ \$42.99	π	0191-0797	\$21,700 \$55,200		
Casing (8.1" - 10.0") Casing (6.1" - 8.0")	1750' - 9 5/8" 36# L80 LT&C @ \$26.07/ft 9000' - 7" 29# HCP-110 LT&C @ \$26.99/ft		0191-0798 0191-0799	\$302,800		
Casing (4.1" - 6.0")	10370' - 4 1/2" 13.5# P-110 BPN @ \$14.94	/ft	0191-0799	\$302,000	0191-0797	\$279,700
Tubing	8400' - 2 7/8" 6.5# L-80 EUE 8rd @ \$5.74/f				0191-0798	\$69,500
Drilling Head			0191-0880	\$40,000		
Tubing Head & Upper Section					0191-0870	\$30,000
Horizontal Completion Tools	Completion Liner Hanger				0191-0871	\$75,000
Sucker Rods					0191-0875	
Subsurface Equipment	Packer				0191-0880	\$10,000
Artificial Lift Systems	Gas Lift Valves				0191-0884	\$25,000
Pumping Unit	1/2 VPLUSMD sumplicing Durant Desert	mn			0191-0885	\$55,000
Surface Pumps & Prime Movers Tanks - Oil	1/2 VRU/SWD pump/Circ Pump/Booster co	шһ			0191-0886 0191-0890	\$90,000
Tanks - Water	1/2 - 5 750 bbl steel coated				0191-0890	\$78,000
Separation / Treating Equipment	172 O 100 DDI Steel Coaled				0191-0895	\$95,000
Heater Treaters, Line Heaters	6'x20'x75# HT	-			0191-0897	\$90,000
Metering Equipment	****				0191-0898	\$35,000
Line Pipe & Valves - Gathering	1/2 of 3.4 miles of 6" poly for SWD				0191-0900	\$100,000
Fittings / Valves & Accessories					0191-0906	\$75,000
Cathodic Protection					0191-0908	\$45,000
Electrical Installation					0191-0909	\$120,000
Equipment Installation	4/0 50 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				0191-0910	\$80,000
Pipeline Construction	1/2 of 3.4 miles 6" surface poly for SWD	TOTAL		\$440.700	0191-0920	\$42,500
		UBTOTAL		\$419,700		\$1,394,700
				\$3,099,500		\$6,012,100
	TOTAL WEI	L C031		\$9,7	11,600	
Extra Expense Insurance						
	ered by Operator's Extra Expense Insurance ar ured Extra Expense Insurance covering costs of w					m 0180-0185.
I elect to purchase my own well control insurance policy.						
If neither box is checked above, non-opera	ating working interest owner elects to be covered by Oper	ator's well cont	rol insurance.			
Prepared by: T. Adam	s	Date:	3/22/2021			
Company Approval:		Date:	3/22/2021			
laint Owner Interest:	Amount					
Joint Owner Interest: Joint Owner Name:	Amount: Si	gnature:				

Well Name: The Dude 20/19 Fee 202H Prospect: Wolfcamp Y Sand					
Location: SL: 1,280' FNL & 550' FEL (24, T22S-R26E); BHL: 1,980' FNL & 200' FEL	(20) Co	unty Eddy			ST NM
Sec. 19-20 Bik: Survey: TWP	228	RNG: 27	Prop. T	/D: 8992	TMD:####
INTANGIBLE COSTS 0180		CODE	TCP	CODE	CC
Regulatory Permits & Surveys		0190-0100	\$10,000	0190-0200	
Location / Road / Site / Preparation		0190-0104	\$85,000		\$25,000
Location / Restoration		0190-0105	\$150,000		\$30,000
Daywork / Turnkey / Footage Drilling 27 days drlg / 3 days comp @ \$21,500/	d	0190-0111	\$592,000		\$87,600
Fuel 1700 gal/day @ 2.74/gal		0190-0115	\$152,000		\$350,000
Mud, Chemical & Additives Horizontal Drillout Services		0190-0121	\$250,000	0190-0221 0190-0222	\$250,000
Cementing		0190-0126	\$100,000	0190-0222	\$30,000
Logging & Wireline Services		0190-0133	\$2,500	0190-0233	\$425,000
Casing / Tubing / Snubbing Service		0190-0136	\$20,000	0190-0236	\$90,000
Mud Logging		0190-0138	\$30,000		
Stimulation 50 Stg 20.4 MM gal / 20.4 MM lb				0190-0243	\$2,050,000
Stimulation Rentals & Other				0190-0244	\$318,000
Water & Other		0190-0146	\$40,000		\$504,000
Bits		0190-0147	\$100,000		\$8,000
Inspection & Repair Services Misc. Air & Pumping Services		0190-0152	\$40,000	0190-0252 0190-0257	\$5,000 \$10,000
Testing & Flowback Services		0190-0157 0190-0159	\$15,000		\$30,000
Completion / Workover Rig		0100-0108	ψ10,000	0190-0259	\$10,500
Rig Mobilization		0190-0163	\$100,000	0.00 0202	\$10,000
Transportation		0190-0166	\$30,000	0190-0266	\$20,000
Welding Services		0190-0167	\$5,000	0190-0267	\$15,000
Contract Services & Supervision	****	0190-0173	\$48,000	0190-0273	\$18,000
Directional Services Includes Vertical Control		0190-0177	\$300,000		
Equipment Rental		0190-0182	\$326,900		\$30,000
Well / Lease Legal		0190-0184	\$5,000		
Well / Lease Insurance		0190-0185	\$5,900		
Intangible Supplies		0190-0189	\$8,000		\$10,000
Damages		0190-0192	\$10,000	0190-0292	£24.000
ROW & Easements Pipeline Interconnect		0190-0193		0190-0293 0190-0294	\$34,000 \$88,000
Company Supervision		0190-0195	\$192,000		\$68,800
Overhead Fixed Rate		0190-0196	\$10,000		\$20,000
Well Abandonment		0190-0198	7.01	0190-0298	720,000
Contingencies 2% (TCP) 2% (CC)		0190-0199	\$52,500	0190-0299	\$90,500
	TOTAL		\$2,679,800		\$4,617,400
TANGIBLE COSTS 0181					
Casing (19.1" - 30")		0191-0796			
Casing (10.1" - 19.0") 1450' - 13 3/8" 54.5# J-55 ST&C @ \$42.99/ft		0191-0797	\$21,700		
Casing (8.1" - 10.0") 1750' - 9 5/8" 36# L80 LT&C @ \$26.07/ft		0191-0798	\$55,200		
Casing (6.1" - 8.0") 9000' - 7" 29# HCP-110 LT&C @ \$26.99/ft		0191-0799	\$302,800	0.101.0707	0070 700
Casing (4.1" - 6.0") 10370' - 4 1/2" 13.5# P-110 BPN @ \$14.94/ft Tubing 8400' - 2 7/8" 6.5# L-80 EUE 8rd @ \$5.74/ft				0191-0797 0191-0798	\$279,700
Tubing 8400' - 2 7/8" 6.5# L-80 EUE 8rd @ \$5.74/ft Drilling Head		0191-0880	\$40,000	0191-0798	\$69,500
Tubing Head & Upper Section		0191-0000	Ψ40,000	0191-0870	\$30,000
Horizontal Completion Tools Completion Liner Hanger				0191-0871	\$75,000
Sucker Rods				0191-0875	4.0,000
Subsurface Equipment Packer				0191-0880	\$10,000
Artificial Lift Systems Gas Lift Valves				0191-0884	\$25,000
Pumping Unit				0191-0885	
Surface Pumps & Prime Movers 1/2 VRU/SWD pump/Circ Pump/Booster comp)			0191-0886	\$55,000
Tanks - Oil 1/2 - 6 750 bbl steel				0191-0890	\$90,000
Tanks - Water 1/2 - 5 750 bbl steel coated				0191-0891	\$78,000
Separation / Treating Equipment				0191-0895	\$95,000
Heater Treaters, Line Heaters 6'x20'x75# HT				0191-0897 0191-0898	\$90,000 \$35,000
Metering Equipment Line Pipe & Valves - Gathering 1/2 of 3.4 miles of 6" poly for SWD				0191-0898	\$100,000
Fittings / Valves & Accessories				0191-0906	\$75,000
Cathodic Protection				0191-0908	\$45,000
Electrical Installation				0191-0909	\$120,000
Equipment Installation				0191-0910	\$80,000
Pipeline Construction 1/2 of 3.4 miles 6" surface poly for SWD				0191-0920	\$42,500
	TOTAL		\$419,700		\$1,394,700
SUB	TOTAL		\$3,099,500		\$6,012,100
TOTAL WELL	COST		\$9,1	11,600	
Extra Expense Insurance					
l elect to be covered by Operator's Extra Expense Insurance and pay my proportionate share of the premium. Operator has secured Extra Expense Insurance covering costs of well control, clean up and redrilling as estimated in Line Item 0180-0185.					
l elect to purchase my own well control insurance policy.					
If neither box is checked above, non-operating working interest owner elects to be covered by Operator					
Prepared by: T. Adams	Date:	3/22/2021	_		
Company Approval:	Date:	3/22/2021	_		
Joint Owner Interest: Amount:					
	ture:				

Well Name: The Dude 20/19 Fee 203H Prospect: Wolfcamp Y Sand				
Location: SL: 1,300' FSL & 500' FEL (24, T22S-R26E); BHL: 1,980' FSL & 200' FEL (20	0) County Eddy			ST NM
Sec. 19-20 Blk: Survey: TWP 2	22S RNG: 2	Prop. TV	/D: 8992	TMD #####
INTANGIBLE COSTS 0180	CODE	TCP	CODE	CC
Regulatory Permits & Surveys	0190-0100	\$10,000		
Location / Road / Site / Preparation	0190-0104	\$85,000		\$25,000
Location / Restoration	0190-0105	\$150,000		\$30,000
Daywork / Turnkey / Footage Drilling 27 days drlg / 3 days comp @ \$21,500/d	0190-0111	\$592,000	0190-0211	\$87,600
Fuel 1700 gal/day @ 2.74/gal	0190-0115	\$152,000	0190-0215	\$350,000
Mud, Chemical & Additives	0190-0121	\$250,000	0190-0221	
Horizontal Drillout Services			0190-0222	\$250,000
Cementing	0190-0126	\$100,000	0190-0226	\$30,000
Logging & Wireline Services	0190-0133	\$2,500	0190-0233	\$425,000
Casing / Tubing / Snubbing Service	0190-0136	\$20,000	0190-0236	\$90,000
Mud Logging	0190-0138	\$30,000		
Stimulation 50 Stg 20.4 MM gal / 20.4 MM lb			0190-0243	\$2,050,000
Stimulation Rentals & Other			0190-0244	\$318,000
Water & Other	0190-0146	\$40,000		\$504,000
Bits	0190-0147	\$100,000		\$8,000
Inspection & Repair Services	0190-0152	\$40,000		\$5,000
Misc. Air & Pumping Services	0190-0157		0190-0257	\$10,000
Testing & Flowback Services	0190-0159	\$15,000	0190-0259	\$30,000
Completion / Workover Rig			0190-0262	\$10,500
Rig Mobilization	0190-0163	\$100,000		
Transportation	0190-0166	\$30,000	0190-0266	\$20,000
Welding Services	0190-0167	\$5,000	0190-0267	\$15,000
Contract Services & Supervision	0190-0173	\$48,000		\$18,000
Directional Services Includes Vertical Control	0190-0177	\$300,000		
Equipment Rental	0190-0182	\$326,900		\$30,000
Well / Lease Legal	0190-0184	\$5,000		7-1-1
Well / Lease Insurance	0190-0185	\$5,900		
Intangible Supplies	0190-0189	\$8,000		\$10,000
Damages	0190-0192	\$10,000		ψ10,022
ROW & Easements	0190-0192	ψ10,000	0190-0292	\$34,000
Pipeline Interconnect	0100 0100		0190-0294	\$88,000
Company Supervision	0190-0195	\$192,000		\$68,800
Overhead Fixed Rate	0190-0195	\$10,000		\$20,000
Well Abandonment	0190-0198	\$10,000	0190-0298	Ψ20,000
Contingencies 2% (TCP) 2% (CC)	0190-0198	\$52,500		\$90,500
	OTAL 0190-0199	\$2,679,800		\$4,617,400
	TAL	\$2,010,000		φ τ ,υ11,τυυ
TANGIBLE COSTS 0181				
Casing (19.1" - 30")	0191-0796	201 700		
Casing (10.1" - 19.0") 1450' - 13 3/8" 54.5# J-55 ST&C @ \$42.99/ft	0191-0797	\$21,700		
Casing (8.1" - 10.0") 1750' - 9 5/8" 36# L80 LT&C @ \$26.07/ft	0191-0798			
Casing (6.1" - 8.0") 9000' - 7" 29# HCP-110 LT&C @ \$26.99/ft	0191-0799	\$302,800		2070 700
Casing (4.1" - 6.0") 10370' - 4 1/2" 13.5# P-110 BPN @ \$14.94/ft			0191-0797	\$279,700
Tubing 8400' - 2 7/8" 6.5# L-80 EUE 8rd @ \$5.74/ft		212.000	0191-0798	\$69,500
Drilling Head	0191-0880	\$40,000		200,000
Tubing Head & Upper Section			0191-0870	\$30,000
Horizontal Completion Tools Completion Liner Hanger			0191-0871	\$75,000
Sucker Rods			0191-0875	210,000
Subsurface Equipment Packer			0191-0880	\$10,000
Artificial Lift Systems Gas Lift Valves			0191-0884	\$25,000
Pumping Unit			0191-0885	
Surface Pumps & Prime Movers 1/2 VRU/SWD pump/Circ Pump/Booster comp			0191-0886	\$55,000
Tanks - Oil 1/2 - 6 750 bbl steel			0191-0890	\$90,000
Tanks - Water 1/2 - 5 750 bbl steel coated			0191-0891	\$78,000
Separation / Treating Equipment			0191-0895	\$95,000
Heater Treaters, Line Heaters 6'x20'x75# HT			0191-0897	\$90,000
Metering Equipment			0191-0898	\$35,000
Line Pipe & Valves - Gathering 1/2 of 3.4 miles of 6" poly for SWD			0191-0900	\$100,000
Fittings / Valves & Accessories			0191-0906	\$75,000
Cathodic Protection			0191-0908	\$45,000
Electrical Installation			0191-0909	\$120,000
Equipment Installation			0191-0910	\$80,000
Pipeline Construction 1/2 of 3.4 miles 6" surface poly for SWD			0191-0920	\$42,500
	OTAL	\$419,700		\$1,394,700
SUBTO		\$3,099,500		\$6,012,100
				\$0,012,100
TOTAL WELL CO	281	\$9,1	11,600	
Extra Expense Insurance				
l elect to be covered by Operator's Extra Expense Insurance and pay my proportionate share of the premium. Operator has secured Extra Expense Insurance covering costs of well control, clean up and redrilling as estimated in Line Item 0180-0185.				
I elect to purchase my own well control insurance policy.				
If neither box is checked above, non-operating working interest owner elects to be covered by Operator's w				
Prepared by: T. Adams	Date: 3/22/202			
Prepared by: T. Adams				
Prepared by: T. Adams Company Approval:	Date: 3/22/202			
Prepared by: T. Adams	Date: 3/22/202 3/22/202			

Well Name: The Dude 20/19	9 Fee 204H	Prospe	ect: Wolfca	mp Y Sand		
Location: SL: 1,250' FSL & 500'	FEL (24, T22S-R26E); BHL: 1,980' FSL & 20	00' FEL (20) Co	unty Eddy			ST NM
Sec. 19-20 Blk:	Survey:	TWP 22S	RNG: 2	7E Prop. T\	/D: 8992	TMD: #####
	TANGIBLE COSTS 0180		CODE	TCP	CODE	CC
Regulatory Permits & Surveys	TANGIBLE COSTS 0100		0190-0100	\$10,000		00
Location / Road / Site / Preparation	on .		0190-0104	\$85,000		\$25,000
Location / Restoration			0190-0105	\$150,000		\$30,000
Daywork / Turnkey / Footage Drill	ing 27 days drlg / 3 days comp @ \$2	1,500/d	0190-0111	\$592,000		\$87,600
Fuel 1700 gal/day @ 2.74/ga			0190-0115	\$152,000		\$350,000
Mud, Chemical & Additives			0190-0121	\$250,000		
Horizontal Drillout Services				0400.000	0190-0222	\$250,000
Cementing			0190-0126 0190-0133	\$100,000 \$2,500		\$30,000 \$425,000
Logging & Wireline Services Casing / Tubing / Snubbing Services	20		0190-0133	\$2,500		\$90,000
Mud Logging	Je		0190-0138	\$30,000	0190-0236	\$90,000
Stimulation	50 Stg 20.4 MM gal / 20.4 MM lb		0190-0138	\$30,000	0190-0243	\$2,050,000
Stimulation Rentals & Other	oo olg 20.1 Milli gal / 20.1 Milli la				0190-0244	\$318,000
Water & Other			0190-0146	\$40,000		\$504,000
Bits			0190-0147	\$100,000		\$8,000
Inspection & Repair Services	,		0190-0152	\$40,000	0190-0252	\$5,000
Misc. Air & Pumping Services			0190-0157		0190-0257	\$10,000
Testing & Flowback Services			0190-0159	\$15,000		\$30,000
Completion / Workover Rig					0190-0262	\$10,500
Rig Mobilization	144.00		0190-0163	\$100,000	0.152.2	400.000
Transportation (Maldian Comisson		- Will	0190-0166	\$30,000		\$20,000
Welding Services			0190-0167	\$5,000		\$15,000
Contract Services & Supervision Directional Services	Includes Vertical Control		0190-0173 0190-0177	\$48,000 \$300,000	0190-0273	\$18,000
Equipment Rental	modues vertical Control		0190-0177	\$300,000	0190-0282	\$30,000
Well / Lease Legal			0190-0182	\$5,000		\$30,000
Well / Lease Insurance			0190-0185	\$5,900		
Intangible Supplies	1000		0190-0189	\$8,000		\$10,000
Damages			0190-0192	\$10,000		7.2,500
ROW & Easements			0190-0193		0190-0293	\$34,000
Pipeline Interconnect					0190-0294	\$88,000
Company Supervision			0190-0195	\$192,000		\$68,800
Overhead Fixed Rate			0190-0196	\$10,000	0190-0296	\$20,000
Well Abandonment			0190-0198		0190-0298	
Contingencies	2% (TCP) 2% (CC)	TOTAL	0190-0199	\$52,500	0190-0299	\$90,500
	ANOIDI E COOTO MAN	TOTAL		\$2,679,800		\$4,617,400
	ANGIBLE COSTS 0181		0101 0700			
Casing (19.1" - 30") Casing (10.1" - 19.0")	14501 12 2/0" E4 5# 1 55 CT9 C @ 642	00/6	0191-0796	604 700		
Casing (8.1" - 19.0")	1450' - 13 3/8" 54.5# J-55 ST&C @ \$42 1750' - 9 5/8" 36# L80 LT&C @ \$26.07/9		0191-0797 0191-0798	\$21,700 \$55,200		
Casing (6.1" - 10.0")	9000' - 7" 29# HCP-110 LT&C @ \$26.99	9/ft	0191-0798	\$302,800		
Casing (4.1" - 6.0")	10370' - 4 1/2" 13.5# P-110 BPN @ \$14		0191-0199	ψ502,000	0191-0797	\$279,700
Tubing	8400' - 2 7/8" 6.5# L-80 EUE 8rd @ \$5.7				0191-0798	\$69,500
Drilling Head			0191-0880	\$40,000		
Tubing Head & Upper Section					0191-0870	\$30,000
Horizontal Completion Tools	Completion Liner Hanger				0191-0871	\$75,000
Sucker Rods					0191-0875	
Subsurface Equipment	Packer				0191-0880	\$10,000
Artificial Lift Systems	Gas Lift Valves				0191-0884	\$25,000
Pumping Unit	4/0 V/DLUGVA/D/D				0191-0885	AFF 000
Surface Pumps & Prime Movers	1/2 VRU/SWD pump/Circ Pump/Booster	comp			0191-0886	\$55,000
Tanks - Oil Tanks - Water	1/2 - 6 750 bbl steel 1/2 - 5 750 bbl steel coated				0191-0890	\$90,000 \$78,000
Separation / Treating Equipment	112 - 0 100 bbi steel coated				0191-0891 0191-0895	\$95,000
Heater Treaters, Line Heaters	6'x20'x75# HT				0191-0895	\$90,000
Metering Equipment					0191-0898	\$35,000
Line Pipe & Valves - Gathering	1/2 of 3.4 miles of 6" poly for SWD				0191-0900	\$100,000
Fittings / Valves & Accessories					0191-0906	\$75,000
Cathodic Protection					0191-0908	\$45,000
Electrical Installation					0191-0909	\$120,000
Equipment Installation					0191-0910	\$80,000
Pipeline Construction	1/2 of 3.4 miles 6" surface poly for SWD				0191-0920	\$42,500
		TOTAL		\$419,700		\$1,394,700
		SUBTOTAL		\$3,099,500		\$6,012,100
	TOTAL W	ELL COST		\$9,1	11,600	
Extra Expense Insurance						
	ered by Operator's Extra Expense Insurance					
Operator has secured Extra Expense Insurance covering costs of well control, clean up and redrilling as estimated in Line Item 0180-0185. I elect to purchase my own well control insurance policy.						
If neither box is checked above, non-operating working interest owner elects to be covered by Operator's well control insurance.						
Prepared by: T. Adams		Date:	3/22/2021			
Company Approval:		Date:	3/22/2021	-		
Joint Owner Interest:	Amount:					
Joint Owner Name:		Signature:				

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

OIL, GAS AND MINERAL LEASE

THIS AGREEMENT made effective for all purposes on April, 1 2021, between Realeza Del Spear, Lessor, whose address PO Box 1684, Midland, TX 79702, and Alpha Energy Partners LLC, Lessee, whose address is P. O. Box 10701, Midland, Texas 79702 WITNESSETH:

Township-22-South, Range-27-East, N.M.P.M.

Section 20: S2SE, SESW

*Whether listed above or not, it is the intent of the Lessor and Lessee that this Oil and Gas Lease covers All of Lessor's minerals in Section 20 of Township-22-South, Range-27-East, N.M.PM.

This lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the land above described and (a) owned or claimed by Lessor by limitation, prescription, possession, reversion or unrecorded instrument or (b) as to which Lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by Lessee for a more complete or accurate description of said land. For the purpose of determining the amount of any bonus or other payment hereunder, said land shall be deemed to contain 120.0 gross acre(s), whether actually containing more or less, and the above recital of acreage in any tract shall be deemed to be the true acreage thereof. Lessor accepts the bonus as lump sum consideration for this paid-up lease and all rights and options hereunder.

- 2. Unless sooner terminated or longer kept in force under other provisions hereof, this lease shall remain in force for a term of 3 years from the date hereof, hereinafter called "primary term", and as long thereafter as operations, as hereinafter defined in paragraph 6, are conducted upon said land with no cessation for more than ninety (90) consecutive days.
- 3. As royalty, Lessee covenants and agrees: (a) To deliver to the credit of Lessor, in the pipe line to which Lessee may connect its wells, the equal (3/16) part of all oil produced and saved by Lessee from said land, or from time to time, at the option of Lessee, to pay Lessor the average posted market price of such (3/16) part of such oil at the wells as of the day it is run to the pipe line or storage tanks, Lessor's interest, in either case, to bear (3/16) of the cost of treating oil to render it marketable pipe line oil; (b) for gas (including casinghead gas) and all other substances covered hereby, the royalty shall be (3/16) of the proceeds realized by Lessee from the sale thereof, less a proportionate part of ad valorem taxes and production, severance, or other excise taxes and the costs incurred by Lessee in delivering, processing or otherwise marketing such gas or other substances, provided the Lessee shall have the continuing right to purchase such production at the prevailing wellhead market price paid for production of similar quality in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) pursuant to comparable purchase contracts entered into on the same or nearest preceding date as the date on which Lessee commences it purchases hereunder, and (c) To pay Lessor on all other minerals mined and marketed or utilized by Lessee from said land, one-tenth either in kind or value at the well or mine at Lessee's election, except that on sulphur mined and marketed the royalty shall be three dollars (\$3.00) per long ton. If, at the expiration of the primary term or at any time or times thereafter, there is any well on said land or on lands with which said land or any portion thereof has been pooled, capable of producing oil or gas, and all such wells are shut-in, this lease shall, nevertheless, continue in force as though operations were being conducted on said land for so long as said wells are shut-in, and thereafter this lease may be continued in force as if no shut-in had occurred. Lessee covenants and agrees to use reasonable diligence to produce, utilize, or market the minerals capable of being produced from said wells, but in the exercise of such diligence, Lessee shall not be obligated to install or furnish facilities other than well facilities and ordinary lease facilities of flow lines, separators, and lease tank, and shall not be required to settle labor trouble or to market gas upon terms unacceptable to Lessee. If, at any time or times after the expiration of the primary term, all such wells are shut-in for a period of ninety consecutive days, and during such time there are no operations on said land, then at or before the expiration of said ninety day period, Lessee shall pay or tender, by check or draft of Lessee, as royalty, a sum equal to one dollar (\$1.00) for each acre of land then covered hereby. Lessee shall make like payments or tenders at or before the end of each anniversary of the expiration of said ninety day period if upon such anniversary this lease is being continued in force solely by reason of the provisions of this paragraph. Each such payment or tender shall be made to the parties who at the time of payment would be entitled to receive the royalties which would be paid under this lease if the wells were producing, and may be paid or tendered to Lessor, his successors or assigns at the address above. If at any time that Lessee pays or tenders shut-in royalty, two or more parties are, or claim to be, entitled to receive same, Lessee may, in lieu of any other method of payment herein provided, pay or tender such shut-in royalty, in the manner above specified, either jointly to such parties or separately to each in accordance with their respective ownership thereof, as Lessee may elect. Any payment hereunder may be made by check or draft of Lessee deposited in the mail or delivered to the party entitled to receive payment on or before the last date for payment. Nothing herein shall impair Lessee's right to release as provided in paragraph 5 hereof. In the event of assignment of this lease in whole or in part, liability for payment hereunder shall rest exclusively on the then owner or owners of this lease, severally as to the acreage owned by each.
- 4. Lessee is hereby granted the right, at its option, to pool or unitize any land covered by this lease with any other land, covered by this lease, and/or with any other land, lease, or leases, as to any or all minerals, subsurface depths, or horizons for the production of oil & gas. If units, either at the time established or after enlargement, are prescribed or permitted under any governmental rule or order for the drilling or operation of a well at a regular location, to conform to any established well spacing or density pattern, or for obtaining maximum allowable from any well to be drilled, drilling, or already drilled, any such unit may be established or enlarged to conform to the size so prescribed or permitted by such governmental order or rule. Lessee shall exercise said option as to each desired unit by executing an instrument identifying such unit and filing it for record in the public office in which this lease is recorded. Each of said options may be exercised by Lessee at any time and from time to time while this lease is in force, and whether before or after production has been established either on said land, or on the portion of said land included in the unit, or on other land unitized therewith. A unit established hereunder shall be valid and effective for all purposes of this lease even though there may be mineral, royalty, or leasehold interests in lands within the unit which are not effectively pooled or unitized. Any operations conducted on any part of such unitized land shall be considered, for all purposes except the payment of royalty, operations conducted upon said land under this lease. There shall be allocated to the land covered by this lease within each such unit (or to each separate tract within the unit if this lease covers separate tracts within the unit) that proportion of the total production of unitized minerals from the unit, after deducting any used in lease or unit operations, which the number of surface acres in such land (or in each separate tract) covered by this lease

public office where this lease is recorded a declaration to that effect, if at that time no operations are being conducted thereon for unitized minerals. Subject to the provisions of this paragraph 4, a unit once established hereunder shall remain in force so long as any lease subject thereto shall remain in force. If this lease now or hereafter covers separate tracts, no pooling or unitization of royalty interest as between any such separate tracts is intended or shall be implied or result from the inclusion of such separate tracts within this lease, nor shall this lease or any declaration of pooling hereunder be construed as an attempt or offer to pool or unitize any interest that Lessor has no right to commit to pooling or unitization, but Lessee shall nevertheless have the right to pool or unitize the interest of Lessor as provided in this paragraph 4 with the consequent allocation of production as herein provided. As used in this paragraph 4, the words "separate tract" means any tract with royalty ownership differing, now or hereafter, either as to parties or amounts, from that as to any other part of the leased premises.

- 5. Lessee may at any time and from time to time execute and deliver to Lessor or file of record a release or releases of this lease as to any part or all of said land or of any mineral or horizon there under, and thereby be relieved of all obligations as to the released acreage or interest, except as to the liability for any payments accruing hereunder prior to the time of such surrender which shall survive surrender and continue to as an obligation of Lessee.
- 6. Whenever used in this lease the word "operations" shall mean operations for and any of the following: drilling, testing, completing, recompleting, deepening, plugging back or repairing of a well in search for or in an endeavor to obtain production of oil, gas, sulphur or other minerals, excavating a mine, production of oil, gas, sulphur or other minerals, whether or not in paying quantities.
- 7. Lessee shall have the use, free from royalty, of water, other than from Lessor's water wells, and of oil and gas produced from said land in all operations hereunder. Lessee shall have the right at any time to remove all machinery and fixtures placed on said land, including the right to draw and remove casing. No well shall be drilled nearer than 200 feet to the house or barn now on said land without the consent of the Lessor. Lessee shall pay for damages caused by its operations to growing crops and timber on said land.
- 8. The rights and estate of any party hereto may be assigned from time to time in whole or in part and as to any mineral or horizon. All of the covenants, obligations, and considerations of this lease shall extend to and be binding upon the parties hereto, their heirs, successors, assigns, and successive assigns. No change or division in the ownership of said land, royalties, or other moneys, or any part thereof, howsoever effected, shall increase the obligations or diminish the rights of Lessee, including, but not limited to, the location and drilling of wells and the measurement of production. Notwithstanding any other actual or constructive knowledge or notice thereof of or to Lessee, its successors or assigns, no change or division in the ownership of said land or of the royalties, or other moneys, or the right to receive the same, howsoever effected, shall be binding upon the then record owner of this lease until thirty (30) days after there has been furnished to such record owner at his or its principal place of business by Lessor or Lessor's heirs, successors, or assigns, notice of such change or division, supported by either originals or duly certified copies of the instruments which have been properly filed for record and which evidence such change or division, and of such court records and proceedings, transcripts, or other documents as shall be necessary in the opinion of such record owner to establish the validity of such change or division. If any such change in ownership occurs by reason of the death of the owner, Lessee may, nevertheless pay or tender such royalties, or other moneys, or part thereof, to the credit of the decedent in a depository bank provided for above.
- 9. In the event Lessor considers that Lessee has not complied with all its obligations hereunder, both expressed and implied, Lessor shall notify Lessee in writing, setting out specifically in what respect Lessee has breached this contract. Lessee shall then have sixty (60) days after receipt of said notice within which to meet or commence to meet all or any part of the breaches alleged by Lessor. The service of said notice shall be precedent to the bringing of any action by Lessor on said lease for any cause, and no such action shall be brought until the lapse of sixty (60) days after service of such notice on Lessee. Neither the service of said notice nor the doing of any act by Lessee aimed to meet all or any of the alleged breaches shall be deemed an admission or presumption that Lessee has failed to perform all its obligations hereunder. If this lease is canceled for any cause, it shall nevertheless remain in force and governmental regulations, (but in no event less than forty acres), such acreage to be designated by Lessee as nearly as practicable in the form of a square centered at the well, or in such shape as then existing spacing rules require: and (2) any part of said land included in a pooled unit on which there are operations. Lessee shall also have such easements on said land as are necessary to operations on the acreage so retained.
- 10. Lessor hereby warrants and agrees to defend title to said land against the claims of all persons whomsoever, Lessor's rights and interests hereunder shall be charged primarily with any mortgages, taxes or other liens, or interest and other charges on said land, but Lessor agrees that Lessee shall have the right at any time to pay or reduce the same for Lessor, either before or after maturity, and be subrogated to the rights of the holder thereof and to deduct amounts so paid from royalty or other payments payable or which may become payable to Lessor and/or assigns under this lease. If this lease covers a less interest in the oil, gas, sulphur, or other minerals in all or any part of said land than the entire and undivided fee simple estate (whether Lessor's interest is herein specified or not), or no interest therein, then the royalties and other moneys accruing from any part as to which this lease covers less than such full interest, shall be paid only in the proportion which the interest therein, if any, covered by this lease, bears to the whole and undivided fee simple estate therein. All royalty interest covered by this lease (whether or not owned by Lessor) shall be paid out of the royalty herein provided. This lease shall be binding upon each party who executes it without regard to whether it is executed by all those named herein as Lessor.
- 11. If, by reason of force majeure, Lessee is prevented from satisfying or meeting any condition of this lease, or from complying with any express or implied covenant thereof, or from conducting drilling or reworking operations on or producing oil or gas from the leased premises on land pooled therewith, then while so prevented and for a period of one hundred eighty (180) days thereafter, such condition shall be suspended, and Lessee shall be relieved of the obligation to comply with such covenant and shall not be liable in damages for failure to comply therewith; and this lease shall be extended and continued in force while and so long as Lessee is prevented by force majeure from conducting drilling or reworking operations on or producing oil or gas from the leased premises or land pooled therewith and for one hundred eighty (180) days thereafter; and the time while Lessee is so prevented, plus one hundred eighty (180) days, shall not be counted against Lessee, anything in this Lease to the contrary notwithstanding. The term "force majeure" as used in this lease shall mean and include any one or more of the following: acts of God, floods, storms, explosions, fires, labor troubles, strikes, insurrections, riots, acts of public enemy, scarcity of or inability to obtain or use labor, material, or equipment, federal, state, or local law, ordinance, rule, or regulation of any governmental authority, or inability to identify and secure the right to use a surface location of suitable size and proximity to Lessee's desired placement of any wellbore. Without limitation, force majeure includes the inability to obtain a permit for drilling or operating a well from each governmental or municipal authority having jurisdiction as may be legally required subject only to such conditions and requirements as are acceptable to Lessee, in its sole discretion, and such force majeure shall be considered to continue while and so long as any application for a permit, or for amendment or modification thereof or for a variance from any
- 12. Lessee shall have the right, by the payment or tender to Lessor at any time before the end of the original primary term of a sum equal to the amount per acre paid by Lessee to Lessor for the execution of this lease, to extend the primary term hereof for an additional period of (2) years. If such payment is timely made or tendered, the "primary term", as that term is defined in paragraph 2, shall be considered for all intents and purposes of this lease to be (5) years. The payment or tender of said sum may be by check or draft and may be delivered or mailed to Lessor at the address of Lessor set forth herein or at such other address of which Lessor shall have notified Lessee in writing. In the event of the death of any person entitled to such payment, Lessee may pay or tender it in the name of the deceased or the estate of the deceased, at the address of the deceased according to Lessee's records, until such time as Lessee is furnished with proper evidence of the appointment and qualification of a personal representative of the estate or, if there is no administration of the estate, until Lessee is furnished satisfactory evidence of the identity and address of each heir or devisee of the deceased and that all debts of the estate have been paid. If two or more persons are entitled to the payment that Lessee may make under this paragraph, Lessee may pay or tender said sum to them jointly, with delivery or mail to the address of any of them. Payment or tender to any person entitled to such payment or tender said sum to them jointly, with delivery or mail to the address of any of them. Payment or tender to any person entitled to such payment or tender made by Lessee in a bona fide attempt to exercise the right granted in this paragraph but in error either as to the person or persons entitled to such payment or as to the amount paid or tendered shall nevertheless be effective to extend the primary term in the manner herein provided if Lessee makes or tenders proper payment within thirty (30) days after receiving
- 13. By the execution of this Lease, the Lessor does hereby appoint and designate Lessee, its successors and assigns, its attorneys-in-fact, solely for the purposes of allowing the Lessee to contact the Lessor's lender or mortgagor (if any) on behalf of the Lessor to obtain a Lease Subordination Agreement of

Lessor's mortgage on the leased premises to Lessee's Oil and Gas Leases or some other similar agreement. Lessee will mail a copy of the executed and recorded Lien Subordination Agreement or similar agreement when finalized. When the Lessee has finalized its Lien Subordination Agreement or similar agreement with the Lessor's lender or mortgagor, this limited power-of-attorney herein granted to the Lessee shall in all respects terminate and be revoked.

IN WITNESS WHEREOF, this instrument is executed on $_$		21.
Lessor:		
By:		
NAME		
By:		
ACKNOWLEDGMENT	(Individual if Applicable)	
STATE OF}		
COUNTY OF		
This instrument was acknowledged before me on this	day of	, 2021 by
	NOTARY PUBLIC, State of	
	My commission expires:	
	iviy commission expires.	
ACKNOWLEDGMENT	(Individual if Applicable)	
STATE OF }		
COUNTY OF		
This instrument was acknowledged before me on this	day of	, 2021 by
·		
	NOTARY PUBLIC, State of	
	My commission expires:	
ACKNOWLEDGMENT	(Corporate if Applicable)	
STATE OF}	(Confidence of the Confidence	
COUNTY OF}		
This instrument was acknowledged before me on this on behalf or	day of	, 2021 by
	NOTARY PUBLIC, State of	
	My commission expires:	



August 5, 2021

Realeza Del Spear PO Box 1684 Midland, TX 79702



Re: The Dude 19/20 Fee 201H, 202H, 203H and 204H Surface Change

All of Sections 19 and 20, Township 22 South, Range 27 East, Eddy County, New Mexico

Dear Sir/Madam:

Alpha Energy Partners, LLC ("AEP"), as Operator, previously proposed the drilling of The Dude 19/20 Fee 201H, 202H, 203H, and 204H, with productive laterals located in Sections 19 and 20, Township 22 South, Range 27 East, Eddy County, New Mexico, to the Wolfcamp Formation:

In connection with the above, please note the following:

- A change in SHL has been made with respect to all four wells. The SHLs of the wells have moved from the E/2 of Section 24, T22S-R26E to the locations as described further below. The reason for this change is to more properly provide access to produced water, and hydrocarbon takeaway.
- The Dude 19/20 Fee 201H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,320' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,230' FNL, 350' FEL, or a legal location in Unit A of Section 20 of T22S-R27E, and a bottom hole location approximately 660' FNL, 200' FWL, or a legal location in Unit D of Section 19. The well will be traversing the N/2N/2 of Sections 19 and 20, with the dedicated horizontal spacing unit being the N/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.
- The Dude 19/20 Fee 202H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,320' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,280' FNL, 350' FEL, or a legal location in Unit A of Section 20 of T22S-R27E, and a bottom hole location approximately 1,980' FNL, 200' FWL, or a legal location in Unit E of Section 19. The well will be traversing the S/2N/2 of Sections 19 and 20, with the dedicated horizontal spacing unit being the N/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.
- The Dude 19/20 Fee 203H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,280' resulting in a productive lateral of approximately 9,600'. The surface location for this well

is proposed at approximately 1,280' FSL, 320' FWL, or a legal location in Unit M of Section 21 of T22S-R27E, and a bottom hole location approximately 1,980' FSL, 200' FWL, or a legal location in Unit L of Section 19. The well will be traversing the N/2S/2 of Sections 19 and 20, with the dedicated horizontal spacing unit being the S/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.

• The Dude 19/20 Fee 204H, to be drilled to a depth sufficient to test the Wolfcamp formation at an approximate Total Vertical Depth of 8,990', and to a Total Measured Depth of approximately 19,280' resulting in a productive lateral of approximately 9,600'. The surface location for this well is proposed at approximately 1,230' FSL, 350' FWL, or a legal location in Unit M of Section 21 of T22S-R27E, and a bottom hole location approximately 660' FSL, 200' FWL, or a legal location in Unit M of Section 19. The well will be traversing the S/2S/2 of Sections 19 and 20, with the dedicated horizontal spacing unit being the S/2 of Sections 19 and 20, T22S-R27E, Eddy County, NM.

Please reference your previously received well proposal letter for more information and offer to lease.

As referenced in the previous proposal, AEP is proposing to drill the Wells under the terms of the modified 1989 AAPL form of Operating Agreement dated March 1, 2020, by and between Alpha Energy Partners, as operator and Oxy USA Inc. et al as Non-Operators covers All of Section 19 and All of Section 20, Township 22 South, Range 27 East, Eddy County, New Mexico which has previously been sent to your attention and has the following general provisions:

- 100/300/300 Non-consenting penalty
- \$8,000/\$800 Drilling and Producing rate
- Alpha Energy Partners, LLC named as Operator

In the interest of time, if we do not reach an agreement within 30 days of the date of this letter, AEP will appear before the New Mexico Oil Conservations Division for compulsory pooling of your interest into a horizontal spacing unit for the proposed wells.

If you do not wish to lease your mineral interest, please indicate your participation elections in the spaces provided below, sign, and return (1) copy of this letter along with a signed copy of the previously received AFEs and a copy of your geologic requirements to my attention at the letterhead address or by email at travis@alphapermian.com. Thank you for your time and consideration, feel free to reach out if you have any questions.

Important Note:

AFE costs have not changed, please reference your previously received AFEs for execution.

Respectfully,

Travis Macha

Alpha Energy Partners, LLC

Office: 508 W. Wall St., 12th Floor, Midland, Texas 79701

Mailing: P.O. Box 10701, Midland, Texas 79702

(O) 432-219-8855 (M) 512-200-5319 (email) travis@alphapermian.com

	I/We hereby elect to participate in The Dude 20/19 Fee 201H
	I/We hereby elect <u>not</u> to participate in The Dude 20/19 Fee 201H
	I/We hereby elect to participate in The Dude 20/19 Fee 202H
,,,,	I/We hereby elect <u>not</u> to participate in The Dude 20/19 Fee 202H
	I/We hereby elect to participate in The Dude 20/19 Fee 203H
	I/We hereby elect <u>not</u> to participate in The Dude 20/19 Fee 203H
	I/We hereby elect to participate in The Dude 20/19 Fee 204H
	I/We hereby elect <u>not</u> to participate in The Dude 20/19 Fee 204H
Company:	
Ву:	
Title:	
Date:	

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

IN RE SPC RESOURCES, LLC

CASE NO. 22102

OIL CONSERVATION DIVISION'S APPLICATION
TO REVOKE SPC RESOURCES, LLC'S APPLICATION
FOR PERMIT TO DRILL CAVEMAN 402H WELL

The New Mexico Oil Conservation Division ("Division") applies for an order revoking its approval of SPC Resources, LLC's ("SPC") Application for Permit to Drill ("Application to Drill") the Caveman 402H well.

I. INTRODUCTION

SPC intends to drill and complete the Caveman 402H well (API #30-015-47629) in proximity to the Carlsbad Brine Well Cavity ("Cavity"). The Cavity is an unstable geological feature created by the dissolution and extraction of brine from halite formations for sale to the oil and gas industry. Although partially stabilized by the injection of grout and sand into the southern portion of the Cavity, the northern portion remains at risk of subsidence and collapse. This nonnegligible but unquantifiable risk jeopardizes public highways, a major irrigation canal, a mobile home park, private properties, and ground water in the area. The State of New Mexico has worked for years, at great public expense, to stabilize the Cavity, and SPC's plan of development for the Caveman 402H well prior to full stabilization of the Cavity threatens to negate this taxpayer-funded effort and poses an unacceptable risk of collapse, which would impair critically important infrastructure and resources in the area.

II. APPLICABLE LAW

- 1. The Division has "jurisdiction, authority, and control over all persons, matters, or things necessary or proper to enforce effectively the provisions of [the Oil and Gas Act]...." NMSA 1978, § 70-2-6.
- 2. The Division is authorized to make orders "to prevent crude petroleum oil, natural gas or water from escaping from strata in which it is found into other strata." NMSA 1978, § 70-2-12(B)(2).
- 3. The Division is authorized to make orders "to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties." NMSA 1978, § 70-2-12(B)(7).

III. FACTUAL BACKGROUND

A. THE CAVITY

- 4. The Carlsbad Brine Well was a facility that used a dissolution process to mine salt for commercial use in the oil and gas industry.
- 5. The Cavity is the subsurface cavern that formed as a result of mining of more than 220,000 cubic yards of salt from the Carlsbad Brine Well.
- 6. The Cavity lies beneath or in close proximity to the intersection of two major highways that are the principal routes for economic activity in the region, an irrigation canal that is the primary source of water for an estimated \$100 million of agriculture each year, a railroad that transports freight, potash, crude oil, and a large percentage of the frac sand used in the state, two commercial operations including one with underground fuel storage tanks, a church, a feedstore, a mobile home park, and a major ground water aquifer.

- 7. In 2008, the Energy, Minerals and Natural Resources Department ("EMNRD") identified the Cavity as a potential risk for collapse, and initiated a program to characterize and monitor the Cavity.
- 8. In 2012, EMNRD initiated a detailed evaluation of alternatives to stabilize the Cavity.
- 9. In 2018, EMNRD retained AMEC Environmental & Infrastructure, Inc., now Wood Environment & Infrastructure Solutions, Inc. (Wood)), to implement the selected alternative of in-situ backfilling the Cavity with grout while simultaneously extracting brine.
- 10. Wood implemented the selected remedy in the southern portion of the Cavity, eliminating the immediate risk to the canal, trailer park, and church, but when Wood began to backfill the northern portion of the Cavity, it discovered a larger void with a volume of approximately 100,000 cubic yards extending beneath US 285 and less than 400 feet from US 62/180.
- 11. Because injecting grout into such a large void would not be cost-effective, EMNRD substituted sand for grout and continued to backfill the Cavity.
- 12. During the backfill process in 2020, EMNRD determined that the void would require a volume of sand that would exceed the financial resources available at the time, and suspended backfilling the void.
- 13. After further evaluation, EMNRD concluded that the partially filled void still posed an unacceptable risk of collapse, which could result in surface subsidence damaging a critical transportation artery and the escape of pressurized brine from the cavity into the ground water aquifer above, and decided to continue to backfill the void with sand after securing additional funds.

- 14. EMNRD intends to resume backfilling the void with sand in approximately September 2021 and to complete the project during the spring or early summer of 2022.
- 15. To date, the State of New Mexico, Eddy County, and the City of Carlsbad have invested nearly \$58M, and expect to invest an additional \$24M to stabilize the Cavity.

B. THE CAVEMAN 402H WELL

- 16. On November 5, 2020, the Division's district office in Artesia approved SPC's application to drill the horizontal oil well currently designated as "Caveman 402H".
- 17. The surface hole location and vertical borehole for the Caveman 402H well will be located approximately 7,200 feet from the Cavity.
- 18. The lateral for the Caveman 402H well will extend westward from the vertical borehole for approximately 10,500 feet at a depth of 8,797 feet beneath the surface.
- 19. On April 14, 2021, the Division's Cavity project manager discovered that several horizontal oil wells were planned or had been drilled in proximity to the Cavity.
- 20. On June 17, 2021, SPC sent a letter to the Division stating its intent to commence drilling the Caveman 402H well in late June or early July 2021 and complete it in late September or early October 2021.
- 21. On June 30, 2021, the Division requested that SPC temporarily suspend its plan to drill and complete the Caveman 402H well for twelve (12) months to allow EMNRD to complete the project to stabilize the Cavity.
- 22. On July 1, 2021, SPC refused to temporarily suspend drilling the Caveman 402H well.
- 23. On July 2, 2021, the Division's Director issued an emergency order suspending SPC's Application to Drill the Caveman 402H well and prohibiting SPC from taking any action to

drill or complete the Caveman 402 well in order to protect the Cavity and ENMRD's ongoing stabilization project to prevent collateral injury to life, property, environment, public infrastructure, and neighboring properties.

- 24. On July 16, 2021, the Division again requested that SPC temporarily suspend its plan to drill and complete the Caveman 402H well for twelve (12) months to allow EMNRD to complete the project to stabilize the Cavity, and SPC again refused the request.
 - 25. On July 17, 2021, the emergency order expired by operation of law.
- IV. SPC'S REFUSAL TO TEMPORARILY SUSPEND ITS PLAN TO DRILL AND COMPLETE THE CAVEMAN 402H WELL JEOPARDIZES THE CAVITY, STABILIZATION PROJECT, PUBLIC INFRASTRUCTURE, AND ENVIRONMENT.
- 26. Although the portions of the Cavity are more stable than before, there are substantial uncertainties regarding stability in certain areas that cannot be addressed by the monitoring data collected to date.
- 27. Until EMNRD completes the ongoing stabilization project, seismic activity has a non-negligible but unquantifiable potential to jeopardize the stability of the Cavity.
- 28. Seismic events have been detected at the Cavity, and their frequency has increased due to induced seismicity resulting from oil and gas activities.
- 29. Drilling and/or completing horizontal wells in the vicinity of the Cavity could establish or exacerbate conditions that, combined with subsequent seismic events, result in rock fall and rubble settlement, jeopardizing the stability of the Cavity resulting in damage to public infrastructure and contamination of a ground water aquifer.
- 30. Until the Cavity is stabilized, the Division cannot specify appropriate conditions that would allow SPC to drill and/or complete the Caveman 402H well in a manner that does not

increase the risk and likelihood of injury to neighboring properties, including the Cavity, public infrastructure, and environment.

WHEREFORE, the Division respectfully requests an order revoking its approval of SPC's Application to Drill the Caveman 402H well.

Respectfully submitted,

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

IN RE NEW MEXICO OIL CONSERVATION DIVISION'S
AMENDED APPLICATION FOR ORDER TO REVOKE
ORDER NO. R-21096, AS AMENDED, AND APDS FOR
CAVEMAN #402H AND CAVEMAN 7 12 WCD #003H WELLS

CASE NO. 22102

NEW MEXICO OIL CONSERVATION DIVISION'S AMENDED APPLICATION FOR ORDER TO REVOKE ORDER NO. R-21096, AS AMENDED, AND APDS FOR CAVEMAN #402H AND CAVEMAN 7 12 WCD #003H WELLS

The New Mexico Oil Conservation Division ("Division") amends its application to request an order revoking Order No. R-21096, as amended, and SPC Resources, LLC's ("SPC") Applications for Permit to Drill ("APDs") the Caveman #402H and Caveman 7 12 WCD #003H wells.

I. INTRODUCTION

SPC is authorized to drill and complete wells on and to produce hydrocarbons from a spacing unit in proximity to the Carlsbad Brine Well Cavity ("Cavity"). The Cavity is an unstable geological feature created by the dissolution and extraction of brine from halite formations for sale to the oil and gas industry. Although partially stabilized by the injection of grout and sand into the southern portion of the Cavity, the northern portion remains at risk of subsidence and collapse. This non-negligible but unquantifiable risk jeopardizes public highways, a major irrigation canal, a mobile home park, private properties, and ground water in the area. The State of New Mexico has worked for years and expended significant public funds to stabilize the Cavity, and SPC's development of the spacing unit before the Division determines that the Cavity has been

remediated poses an unacceptable risk of collapse, which would negate this taxpayer-funded effort and impair critically important infrastructure and resources in the area.

II. APPLICABLE LAW

- 1. The Division has "jurisdiction, authority, and control over all persons, matters, or things necessary or proper to enforce effectively the provisions of [the Oil and Gas Act]...." NMSA 1978, § 70-2-6.
- 2. The Division is authorized to make orders "to prevent crude petroleum oil, natural gas or water from escaping from strata in which it is found into other strata." NMSA 1978, § 70-2-12(B)(2).
- 3. The Division is authorized to make orders "to require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties." NMSA 1978, § 70-2-12(B)(7).

III. FACTUAL BACKGROUND

A. THE CAVITY

- 4. The Carlsbad Brine Well was a facility that used a dissolution process to mine salt for commercial use in the oil and gas industry.
- 5. The Cavity is the subsurface cavern that formed as a result of mining of more than 220,000 cubic yards of salt from the Carlsbad Brine Well.
- 6. The Cavity lies beneath or in close proximity to the intersection of two major highways that are the principal routes for economic activity in the region, an irrigation canal that is the primary source of water for an estimated \$100 million of agriculture each year, a railroad that transports freight, potash, crude oil, and a large percentage of the frac sand used in the state,

two commercial operations including one with underground fuel storage tanks, a church, a feedstore, a mobile home park, and a major ground water aquifer.

- 7. In 2008, the Energy, Minerals and Natural Resources Department ("EMNRD") identified the Cavity as a potential risk for collapse, and initiated a program to characterize and monitor the Cavity.
- 8. In 2012, EMNRD initiated a detailed evaluation of alternatives to stabilize the Cavity.
- 9. In 2018, EMNRD retained AMEC Environmental & Infrastructure, Inc., now Wood Environment & Infrastructure Solutions, Inc. ("Wood"), to implement the selected alternative of in-situ backfilling the Cavity with grout while simultaneously extracting brine.
- 10. Wood implemented the selected remedy in the southern portion of the Cavity, eliminating the immediate risk to the canal, trailer park, and church, but when Wood began to backfill the northern portion of the Cavity, it discovered a larger void with a volume of approximately 100,000 cubic yards extending beneath US 285 and less than 400 feet from US 62/180.
- 11. Because injecting grout into such a large void would not be cost-effective, EMNRD substituted sand for grout and continued to backfill the Cavity.
- 12. During the backfill process in 2020, EMNRD determined that the void would require a volume of sand that would exceed the financial resources available at the time, and suspended backfilling the void.
- 13. After further evaluation, EMNRD concluded that the partially filled void still posed an unacceptable risk of collapse, which could result in surface subsidence damaging a critical

transportation artery and the escape of pressurized brine from the cavity into the ground water aquifer above, and decided to continue to backfill the void with sand after securing additional funds.

- 14. EMNRD intends to resume backfilling the void with sand in approximately September 2021 and to complete the project during the spring or early summer of 2022.
- 15. To date, the State of New Mexico, Eddy County, and the City of Carlsbad have invested nearly \$58M, and expect to invest an additional \$24M to stabilize the Cavity.

B. THE SPACING UNIT

- 16. On August 6, 2019, SPC filed an application to pool all uncommitted interests in and produce hydrocarbons from the Wolfcamp formation underlying a spacing unit comprised of the W/2 and E/2 of Section 12, Township 22 South, Range 26 East, and the W/2 and E/2 of Section 7, Township 22 South, Range 27 East, NMPM, Eddy County, New Mexico ("Spacing Unit").
- 17. On February 12, 2020, OCD granted SPC's application and issued Order No. R-21096.
- 18. On April 12, 2021, OCD issued Order No. R-21096-A, which updated the form of order, granted an extension of time to commence drilling until February 12, 2022, pooled additional interest owners, and affirmed the material provisions of the original order.
- 19. On May 17, 2021, OCD issued Order No. R-21096-B, which pooled additional interest owners and affirmed the material provisions of the original order.

C. THE CAVEMAN #402H WELL

20. On November 5, 2020, the Division's district office in Artesia approved SPC's APD for the Caveman #402H well (API 30-015-47629) on the Spacing Unit.

- 21. The proposed surface hole location and vertical borehole for the Caveman #402H well is located approximately 7,200 feet from the Cavity.
- 22. The proposed lateral for the Caveman #402H well extends westward from the vertical borehole for approximately 10,500 feet at a depth of 8,797 feet beneath the surface.
- 23. On or about April 14, 2021, the Division's Cavity project manager discovered that several wells were planned or had been drilled in proximity to the Cavity.
- 24. On June 17, 2021, SPC sent a letter to the Division stating its intent to commence drilling the Caveman #402H well in late June or early July 2021 and to complete the well in late September or early October 2021.
- 25. On June 30, 2021, the Division requested that SPC temporarily suspend its plan to drill and complete the Caveman #402H well for twelve (12) months to allow EMNRD to complete the project to stabilize the Cavity.
- 26. On July 1, 2021, SPC refused to temporarily suspend drilling and completing the Caveman #402H well.
- 27. On July 2, 2021, the Division's Director issued an emergency order suspending the APD for the Caveman #402H well and prohibiting SPC from taking any action to drill or complete the well in order to protect the Cavity and ENMRD's ongoing stabilization project to prevent collateral injury to life, property, environment, public infrastructure, and neighboring properties.
- 28. On July 16, 2021, the Division again requested that SPC temporarily suspend its plan to drill and complete the Caveman #402H well for twelve (12) months to allow EMNRD to complete the project to stabilize the Cavity, and SPC again refused the request.
 - 29. On July 17, 2021, the emergency order expired by operation of law.

D. THE CAVEMAN 7 12 WCD #003H WELL

- 30. On November 17, 2020, the Division's district office in Artesia approved SPC's APD for the Caveman 7 12 WCD #003H well (API 30-015-47689) on the Spacing Unit.
- 31. The proposed surface hole location and vertical borehole for the Caveman 7 12 WCD #003H well is located approximately 6,800 feet from the Cavity.
- 32. The proposed lateral for the Caveman 7 12 WCD #003H well extends westward from the vertical borehole for approximately 11,000 feet at a depth of 9,300 feet beneath the surface.
- 33. On August 6, 2021, the Division requested that SPC temporarily suspend its plan to drill and complete the Caveman 7 12 WCD #003H well for twelve (12) months to allow EMNRD to complete the project to stabilize the Cavity.
- 34. On August 9, 2021, SPC refused to temporarily suspend drilling the Caveman 7 12 WCD #003H well.
- IV. SPC'S REFUSAL TO TEMPORARILY SUSPEND ITS PLAN TO DRILL AND COMPLETE WELLS ON AND PRODUCE HYDROCARBONS FROM THE SPACING UNIT JEOPARDIZES THE CAVITY, STABILIZATION PROJECT, PUBLIC INFRASTRUCTURE, AND ENVIRONMENT.
- 35. Although the portions of the Cavity are more stable than before, there are substantial uncertainties regarding stability in certain areas that cannot be addressed by the monitoring data collected to date.
- 36. Until EMNRD completes the ongoing stabilization project, seismic activity has a non-negligible but unquantifiable potential to jeopardize the stability of the Cavity.
- 37. Seismic events have been detected at the Cavity, and their frequency has increased due to induced seismicity resulting from oil and gas activities.

38. Drilling and/or completing wells on the Spacing Unit in the vicinity of the Cavity

could establish or exacerbate conditions that, combined with subsequent seismic events, result in

rock fall and rubble settlement, jeopardizing the stability of the Cavity resulting in damage to

public infrastructure and contamination of a ground water aquifer.

39. The Division cannot specify appropriate conditions that would allow SPC to

develop the Spacing Unit or to drill or complete the Caveman #402H well, the Caveman 7 12

WCD #003H well, or any other well that might be proposed on the Spacing Unit in a manner that

does not increase the risk and likelihood of injury to neighboring properties, including the Cavity,

public infrastructure, and the environment, until the Division determines that the Cavity has been

remediated.

WHEREFORE, the Division respectfully requests an order revoking Order No. R-21096,

as amended, and the APDs for the Caveman #402H and Caveman 7 12 WCD #003H wells.

Respectfully submitted,

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