District I 1625 N. French Dr., Hobbs, NM 88240 Phone (575) 393-6161 Fax (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone (575) 748-1283 Fax (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone (505) 334-6178 Fax (505) 334-6170

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

District IV

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

OCD Case No. 16132

CHEVRON U.S.A.

Exhibit #1

m C-102

1, 2011

propriate

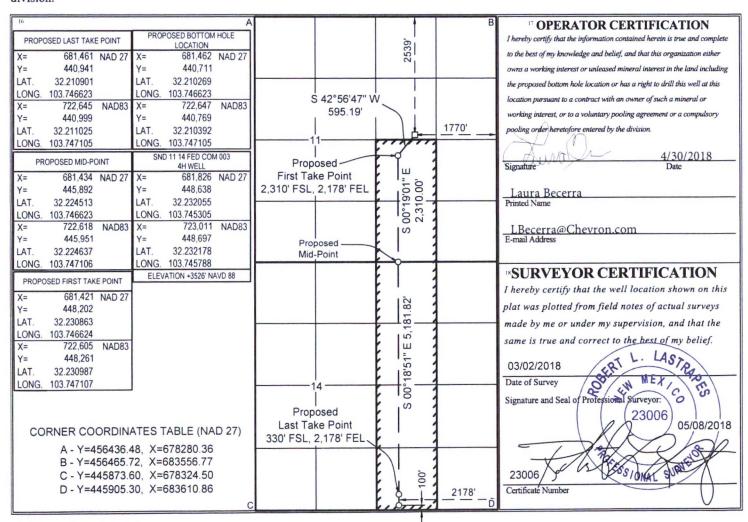
tt Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Num	ber	er ² Pool Code ³ Pool Name							
4 Proper	ty Code			5 P	⁵ Property Name				6 Well Number	
				SND 11	14 FED COM		4H			
⁷ OGR	ID No.			* O	perator Name				⁹ Elevation	
43	23		CHEVRON U.S.A. INC. 3526'					3526'		
				10 Sur	face Locati	ion				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
G	11	24 SOUTH	31 EAST, N.M.P.M		2539'	NORTH	1770'	EAST	EDDY	
			" Bottom 1	Hole Locat	ion If Diffe	erent From S	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
O	14	24 SOUTH	31 EAST, N.M.P.M		100'	SOUTH	2178'	EAST	EDDY	
12 Dedicated A	cres 13 Join	nt or Infill	¹⁴ Consolidation Code	15 Order No.						
240	1									

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



District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone (575) 748-1283 Fax (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410

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

District IV

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Phone: (505) 334-6178 Fax: (505) 334-6170 Santa Fe, NM 87505

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

☐ AMENDED REPORT

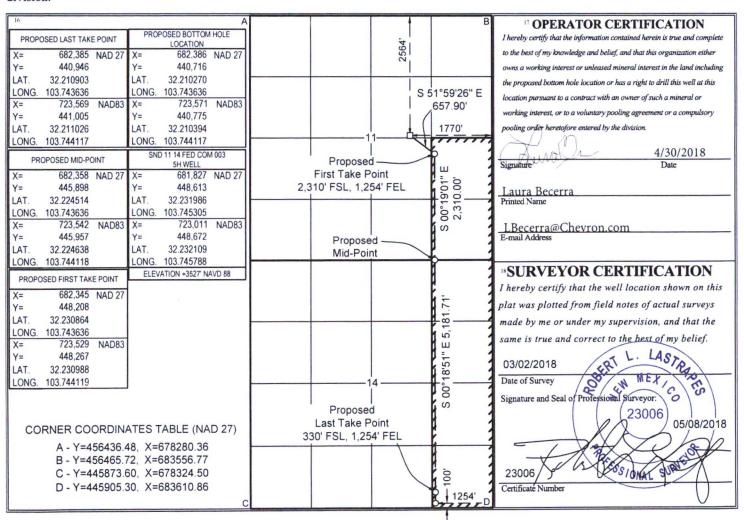
WELL LOCATION AND ACREAGE DEDICATION PLAT

State of New Mexico

Energy, Minerals & Natural Resources Department

	API Num	ber	² Pool Code ³ Pool Name							
⁴ Proper	rty Code	1		5 P	⁵ Property Name				" Well Number	
				SND 11	SND 11 14 FED COM 003				5H	
⁷ OGR	ID No.			* O	perator Name					⁹ Elevation
43	23	CHEVRON U.S.A. INC. 3527'					3527'			
				10 Sur	face Locat	ion				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/\	West line	County
G	11	24 SOUTH	31 EAST, N.M.P.M		2564'	NORTH	1770'	EA	ST	EDDY
			" Bottom 1	Hole Locat	tion If Diffe	erent From S	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/V	West line	County
P	14	24 SOUTH	OUTH 31 EAST, N.M.P.M. 100' SOUTH 1254' EAST		ST	EDDY				
12 Dedicated A	cres 13 Join	t or Infill	14 Consolidation Code	15 Order No.						
240										

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



District I 1625 N French Dr., Hobbs, NM 88240 Phone (575) 393-6161 Fax (575) 393-0720 District III 811 S First St., Artesia, NM 88210 Phone (575) 748-1283 Fax (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone (505) 334-6178 Fax (505) 334-6170

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

District IV

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

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

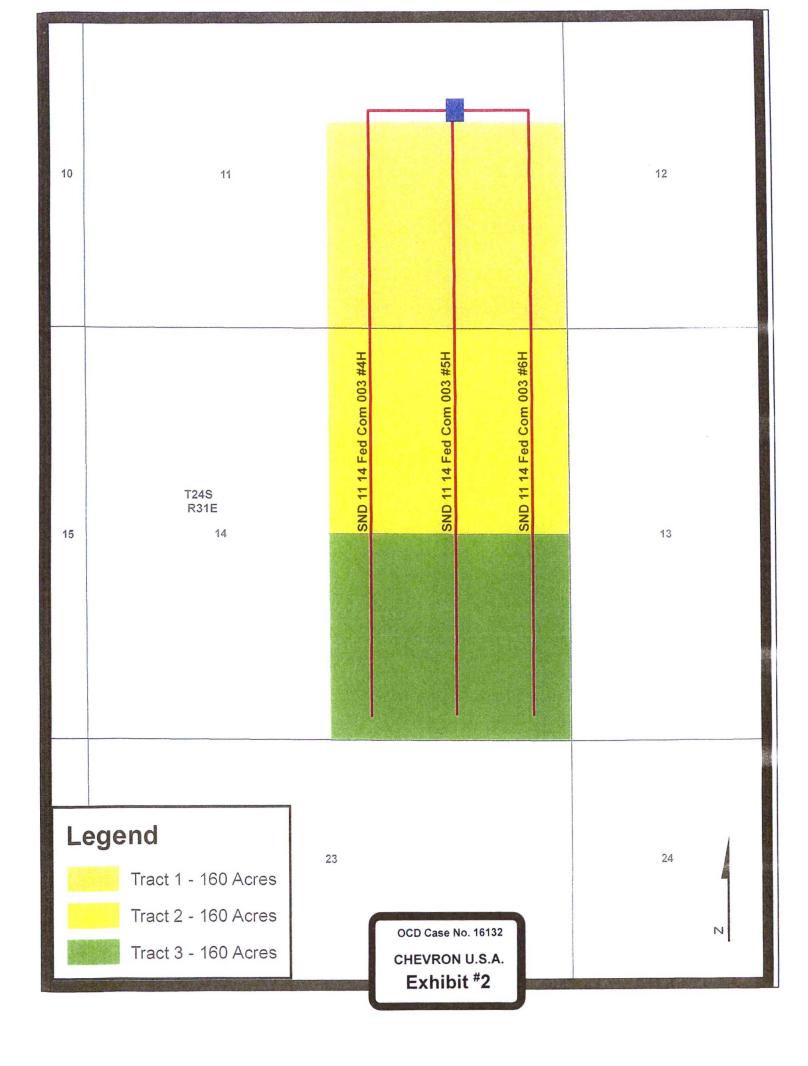
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API	Numb	er ² Pool Code ³ Pool Name								
⁴ Proper	ty Code		⁵ Property Name						Well Number		
					SND 11 14 FED COM 003				6H		
⁷ OGR	ID No.				8 O	perator Name					⁹ Elevation
43	23		CHEVRON U.S.A. INC. 3528'				3528'				
	™ Surface Location										
UL or lot no.	Sect	tion	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County
G	11	1	24 SOUTH	31 EAST, N.M.P.M	1.	2589'	NORTH	1770'	EA	ST	EDDY
				11 Bottom	Hole Locat	ion If Diffe	erent From S	Surface			
UL or lot no.	Sect	tion	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/	West line	County
P	14	1	24 SOUTH	SOUTH 31 EAST, N.M.P.M.		100'	SOUTH	330'	EA	ST	EDDY
12 Dedicated A	cres 13	Joint	or Infill	14 Consolidation Code	15 Order No.						
240											

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

PROPOSED LAST TAKE POINT X= 683,309 NAD 27 Y= 440,952	Y= 440,722		2589'	В	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including
LAT. 32.210904 LONG. 103.740648 X= 724,493 NAD83 Y= 441,011 LAT. 32.211028	Y= 440,781 LAT. 32.210396		6'26" E 0.09'	<u>1770'</u>	the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.
PROPOSED MID-POINT X= 683,282 NAD 27 Y= 445,903 LAT. 32,224516	LONG. 103.741130 SND 11 14 FED COM 003 6H WELL X = 681.827 NAD 27 Y = 448,588 LAT. 32.231917	Prop First Tal 2,310' FSL	ce Point —	S 00°19'01" 2,310.00'	4/30/2018 Signature Date Laura Becerra
LAT. 32.224516 LONG. 103.740648 X= 724.466 NAD83 Y= 445.962 LAT. 32.224639 LONG. 103.741130	LONG. 103.745305		Proposed — Mid-Point	9'01" E	Printed Name LBecerra@Chevron.com E-mail Address
PROPOSED FIRST TAKE POINT X= 683,269 NAD 27 Y= 448,213 LAT. 32,230866 LONG. 103,740648 X= 724,453 NAD83 Y= 448,272 LAT. 32,230989 LONG. 103,741131	ELEVATION +3528' NAVD 88		4	S 00°18'51" E 5,181.61'	Is SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. O3/02/2018 Date of Survey Signature and Seal of Professional Surveyor: 23006
A - Y=456436 B - Y=456465 C - Y=445873	ATES TABLE (NAD 27) 48, X=678280.36 72, X=683556.77 60, X=678324.50 30, X=683610.86	Last Ta 330' FSL	loosed ke Point _ , 330' FEL —	330'	23006 05/08/2018 23006 Certificate Number



32	33	34	35	T23S R31E 36	31	
5	4	3 T245 R31E	ко-5018	имим 069369 1	6	
8	NMNM 063757 9	10 NMNM	029234 11 NMNM 064504	NMNM 067106 12	7	JAVELINA UNIT – LEASE MAP LEGEND FEDERAL (BLM): LEASE
0	NMNM 029234	NMNM 070895	NMNM 031963 NMNM 029234	120901 NMNM 104684	/	STATE OF NEW MEXICO LEASE
17	V0-5789 16 V-2732 VB- 2538	NMNM 056741 NMNM 15	111960 14 NMNM 116044	13	18	
20	21	22	23	24	19 T24S R32E	

OCD Case No. 16132

CHEVRON U.S.A. Exhibit #3



Chris Cooper Land Representative Chevron U.S.A. Inc. 1400 Smith Street Houston, Texas 77002 Tel 713.372.6778 Email ChrisCooper@chevron.com

VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

RECEIVED

.

MAR 1 6 2018

March 12, 2018

Vladin, LLC Artesia Division Office 105 S. 4th Street Artesia, NM 88210

EOG Resources Assets LLC 5509 Champions Drive Midland, Texas 79706

EOG Y Resources, Inc. 5509 Champions Drive Midland, Texas 79706 EOG A Resources, Inc. 5509 Champions Drive Midland, Texas 79706

YATES LEGACY, LLC

Tap Rock Resources 602 Park Point Drive Suite 200 Golden, Colorado 80401

Douglas Cameron McLeod 600 Grant Street, Suite 850 Denver, Colorado 80203

RE:

Proposal To Drill

SNĎ 11 14 FED COM 003 4H SND 11 14 FED COM 003 5H SND 11 14 FED COM 003 6H

S/2 Section 11, Township 24 South, Range 31 East Section 14, Township 24 South, Range 31 East, N.M.P.M., Eddy County, New Mexico

Dear Working Interest Owner:

Chevron U.S.A. Inc. ("Chevron") hereby proposes to drill the above-mentioned wells with the surface hole locations, bottom hole locations, and depths as shown in the attached spreadsheet. Chevron will develop this area by pad drilling.

The wells are proposed to drill vertically to a depth of approximately 9,100' and horizontally in a southern direction within the Avalon formation to the referenced bottom hole location. Total measured depth of the wells is proposed to be approximately 15,900' from surface to terminus. Please note that compliance with topography, cultural, and/or environmental concerns, among others, may require modifications to Chevron's intended procedure and/or location.

Enclosed for your review and execution are detailed AFEs for each well, in duplicate, reflecting estimated costs associated with this proposal. If you intend to participate, please execute in the appropriate box on each AFE, for each individual well, and return to the undersigned within 30 days of receipt of this proposal. A governing Operating Agreement for these wells will be sent to you shortly.

Due to lease retention requirements, Chevron will submit an application for a Compulsory Pooling Order with the New Mexico Oil Conservation Division after 30 days of your receipt of this letter.

OCD Case No. 16132

CHEVRON U.S.A. Exhibit #4

This will allow Chevron to move forward with planning and drilling the subject well(s) while allowing time to properly execute a JOA amongst the parties and meet its lease retention obligations.

Please note that Chevron is open to discuss possible trades, assignments, etc. of your working interest in the subject acreage. Should you be interested or have any questions, please feel free to contact me at the information listed above.

Sincerely,

Chris Cooper Land Representative

Enclosures

		. 4

COMPLETE THIS SECTION ON DELIVERY SENDER: COMPLETE THIS SECTION A. Signature Complete items 1, 2, and 3. Also complete Agent Agent item 4 if Restricted Delivery is desired. Addresse Print your name and address on the reverse so that we can return the card to you. B. Received by (Printed Name) C. Date of Deliver Attach this card to the back of the mailpiece, 16-18 or on the front if space permits. D. Is delivery address different from Item 1? 1. Article Addressed to: If YES, enter delivery address below: EDG Y RESOURCES INC 5509 champions Drive Midland, Texas 79704 3. Service Type Certified Mali ☐ Priority Mall Express™ Registered Return Receipt for Merchandise Insured Mail Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes 2. Article Number 7012 3460 0000 1658 2098 (Transfer from service label) PS Form 3811, July 2013 Domestic Return Receipt COMPLETE THIS SECTION ON DELIVERY **SENDER:** COMPLETE THIS SECTION A. Signature Complete items 1, 2, and 3. Also complete Agent item 4 if Restricted Delivery is desired. Addresse Print your name and address on the reverse C. Date of Deliver so that we can return the card to you. B. Received by (Printed Name) Attach this card to the back of the mailpiece, or on the front if space permits. ☐ Yes D. Is delivery address different from item 1? 1. Article Addressed to: If YES, enter delivery address below: EOG A RESOURCES (nc 5509 Champions Drive 3. Şervice Type ☐ Priority Mail Express™ Midland, Texas 79706 Certified Mail® Return Receipt for Merchandise ☐ Registered ☐ Insured Mail Collect on Delivery

(Transfer from service label)
PS Form 3811, July 2013

2. Article Number

Domestic Return Receipt

7012 3460 0000 1658 2104

4. Restricted Delivery? (Extra Fee)

Yes

				•
				*

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: 	A. Signature X
E0G RESOURCES ASSETS LLC 5509 Champions Deve Michand, Texas 79706	3. Service Type
Midland, Texas 19704	☐ Registered ☐ Priority Mall Express™ ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mall ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes
2. Article Number (Transfer from service label) 7012 34L	0 0000 1629 5091
SENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to:	A. Signature A. Signature A. Signature Address: B. Received by (Printed Name) D. Is delivery address different from item 1? If YES, enter delivery address below:
Tap Rock Resources	

COMPLETE THIS SECTION ON DELIVERY SENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ☐ Agent ☐ Addresse Print your name and address on the reverse so that we can return the card to you. B. Received by (Printed Name) C. Date of Deliver Attach this card to the back of the mailpiece, or on the front if space permits. D. Is delivery address different from item 11 1. Article Addressed to: □ No If YES, enter delivery address below: VIADUN LLC AVTESIA DINSION OFFICE 105 S. 4Th street 3. Service Type Certified Mail® ☐ Priority Mail Express™ Return Receipt for Merchandisa Registered Insured Mail ☐ Collect on Delivery 4. Restricted Delivery? (Extra Fee) ☐ Yes 7012 3460 0000 1658 1664 (Transfer from service label) PS Form 3811, July 2013 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: DUGIAS CAMERON MCLEDA LOO GYAUT STYLET, SUITE 850 DENVEY, CUIDVAAO, 80203	A. Signature X Agent Addressee B. Received by (Printed Name) G. Date of Delivery D. Is delivery address different from Item 1? If YES, enter delivery address below:
Denver, Colorado, 80203	3. Service Type Certified Mall® □ Priority Mall Express™ Registered □ Return Receipt for Merchandise □ Insured Mail □ Collect on Delivery 4. Restricted Delivery? (Extra Fee) □ Yes
2. Article Number (Transfer from service label) 7012 3460	0000 re29 Srrr



HINKLE SHANOR LLP

ATTORNEYS AT LAW
PO BOX 268
SANTA FE, NEW MEXICO 87504
505-982-4554 (FAX) 505-982-8623

WRITER

Gary W. Larson, Partner glarson@hinklelawfirm.com

April 23, 2018

VIA CERTIFIED MAIL

Douglas Cameron McLeod 600 Grant Street, Suite 850 Denver, CO 80203

Re: Chevron U.S.A. Inc. NMOCD Application

Dear Mr. McLeod:

Enclosed is a copy of an application for approval of a 480-acre, non-standard spacing and proration unit and compulsory pooling that Chevron U.S.A. Inc. ("Chevron") has filed with the New Mexico Oil Conservation Division ("the Division"). The proposed non-standard spacing and proration unit is comprised of the E/2 of Section 14 and the SE/4 of Section 11, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico.

This matter is scheduled for hearing at 8:15 a.m. on Thursday, May 17, 2018 in Porter Hall at the Division's offices located at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. You are not required to attend this hearing, but as an owner of an interest that may be affected by Chevron's application, you may appear at the hearing and present testimony. If you do not appear at that time and become a party of record, you will be precluded from contesting the matter at a later date.

A party appearing in a Division case is required by the Division's Rules to file a Pre-Hearing Statement, which in this matter must be filed no later than Thursday, May 10, 2018. The Pre-Hearing Statement must be filed with the Division's Santa Fe office at the address above, and should include: the name of the party and the party's attorney; a concise statement of the case; the name(s) of the witness(es) the party will call to testify at the hearing; the approximate amount of time the party will need to present the party's case; and an identification of any procedural matters that need to be resolved prior to the hearing. The Pre-Hearing Statement must also be provided to me.

Thank you for your attention to this matter.

Very truly yours,

Fary W Larson

GWL:sm Enclosure OCD Case No. 16132

CHEVRON U.S.A.

		•

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you.	A. Signature X. Agent Addressee
Attach this card to the back of the mailpiece, or on the front if space permits.	B. Received by (Printed Name) C; Date of Delivery
1, Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
Douglas Cameron McLeod	
600 Grant Street, Suite 850	
Denver, CO 80203	
	3. Service Type ☐ Priority Mail Express® ☐ Adult-Signature ☐ Registered Mail™
	☐ Adult Signature Restricted Delivery ☐ Registered Mail Restricted Delivery ☐ Delivery
9590 9402 3526 7275 4728 86	☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Merchandise
2. Article Number (Transfer from service label)	□ Collect on Delivery Restricted Delivery □ Signature Confirmation □ Insured Mail □ Restricted Delivery Restricted Delivery
7013 3020 0000 4640 32	C L
PS Form 3811, July 2015 PSN 7530-02-000-9053	Domestic Return Receipt
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3.	A. Signature
Print your name and address on the reverse so that we can return the card to you.	B. Received by (Printed Name) C. Date of Delivery
Attach this card to the back of the mailpiece, or on the front if space permits.	B. Received by (Printed Name)
Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below: No
EOG A Resources Inc.	If YES, enter delivery address below: ☐ No
5509 Champions Drive	
Midland, TX 79706	
	3. Service Type
	☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Registered Mail Restricted Delivery ☐ Delivery
9590 9402 3526 7275 4728 79	☐ Certified Mail Restricted Delivery ☐ Return Receipt for Merchandise ☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation™
2. Article Number (Transfer from service label)	☐ Insured Mail ☐ Signature Confirmation
	Pomestic Return Receipt
PS Form 3811, July 2015 PSN 7530-02-000-9053	Domestic Neturn Necespt
A CONTRACTOR OF THE PARTY OF TH	The second section is a second section of the second
SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
■ Complete items 1, 2, and 3.	A. Signature
Print your name and address on the reverse so that we can return the card to you.	X / Addressee
Attach this card to the back of the mailpiece,	B. Received by (Printed Name) C. Date of Delivery
or on the front if space permits. 1. Article Addressed to:	D. Is delivery address different from item 1? Yes
EOG Resources Assets, LLC	If YES, enter delivery address below: No
5509 Champions Drive	
Midland, TX 79706	
	美国人民共和国人民共和国的
	3. Service Type ☐ Priority Mail Express®
	☐ Adult Signature ☐ Registered Mail™ ☐ Registered Mail Restricted ☐ Registered Mail Restricted
9590 9402 3526 7275 4728 62	Certified Mail® Delivery Certified Mail Restricted Delivery Return Receipt for Merchandise
Article Number (Transfer from service label)	☐ Collect on Delivery Restricted Delivery ☐ Signature Confirmation ☐ Signature Confirmation ☐ Signature Confirmation
	7 8 A) Restricted Delivery Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053

Domestic Return Receipt

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SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, 	A. Signature X
or on the front if space permits. 1. Article Addressed to: EOG Y Resources Inc. 5509 Champions Drive Midland, TX 79706	D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below: ☐ No
9590 9402 3526 7275 4728 55 2 Article Number (Transfer from service label) 7017 0190 0000 8402 31	3. Service Type □ Adult Signature □ Adult Signature Restricted Delivery □ Certified Mail® □ Certified Mail® Restricted Delivery □ Collect on Delivery □ Collect on Delivery Restricted Delivery □ Return Receipt for Merchandise □ Signature Confirmation™ □ Signature Confirmation □ Restricted Delivery
PS Form 3811, July 2015 PSN 7530-02-000-9053	Domestic Return Receipt
SENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Tap Rock Resources 602 Park Point Drive, Suite 200 Golden, CO 80401	A. Signature X
9590 9402 3526 7275 4728 48 2. Article Number (Transfer from Spring 1757) 8402 3	3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail® Certified Mail Restricted Delivery Collect on Delivery Ilivery Restricted Delivery 3. Service Type Registered Mail Express® Registered Mail Mail Restricted Delivery Return Receipt for Merchandise Signature Confirmation™ Signature Confirmation Restricted Delivery
PS Form 3811, July 2015 PSN 7530-02-000-9053	(over \$500) Domestic Return Receipt
SENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits.	A. Signature X. A. Signature B. Received by (Printed Name) T. Ham Iton D. Is delivery address different from item 1? Yes
1. Article Addressed to: Vladin, LLC Artesia Division Office P.O. Box 100 Artesia, NM 88211-0100	If YES, enter delivery address below: ☐ No
9590 9402 3526 7275 4728 31 2. Article Number (<i>Transfer from, service label</i>) 7 0 1 7 0 1 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail Restricted Delivery Collect on Delivery Collect on Delivery Restricted Delivery Signature Confirmation Signature Confirmation Signature Confirmation Restricted Delivery Return Receipt for Merchandise Signature Confirmation Signature Confirmation Restricted Delivery

Domestic Return Receipt

PS Form 3811, July 2015 PSN 7530-02-000-9053

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HINKLE SHANOR LLP

ATTORNEYS AT LAW
PO BOX 268
SANTA FE, NEW MEXICO 87504
505-982-4554 (FAX) 505-982-8623

WRITER

Gary W. Larson, Partner glarson@hinklelawfirm.com

April 23, 2018

VIA CERTIFIED MAIL

COG Operating LLC Once Concho Center 600 West Illinois Avenue Midland, TX 79701

Re: Chevron U.S.A. Inc. NMOCD Application

Dear Sir or Madam:

Enclosed is a copy of an application for approval of a 480-acre, non-standard spacing and proration unit and compulsory pooling that Chevron U.S.A. Inc. ("Chevron") has filed with the New Mexico Oil Conservation Division ("the Division").

The proposed non-standard spacing and proration unit is comprised of the E/2 of Section 14 and SE/4 of Section 11, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico. The location of the proposed project area is orthodox. COG Operating LLC's ("COG") interests are not being pooled, but as the owner of an interest in an offset tract, it is entitled to receive notice of Chevron's application.

This matter is scheduled for hearing at 8:15 a.m. on Thursday, May 17, 2018 in Porter Hall at the Division's offices located at 1220 South St. Francis Drive, Santa Fe, New Mexico 87505. COG is not required to attend this hearing, but as an owner of an interest in an offset tract, it has the right to appear at the hearing and present testimony. If COG does not appear at the hearing it will be precluded from contesting the matter at a later date.

A party appearing in the case is required by the Division's Rules to file a Pre-Hearing Statement, which in this matter must be filed no later than Thursday, May 10, 2018. The Pre-Hearing Statement must be filed with the Division's Santa Fe office at the address above, and should include: the name of the party and the party's attorney; a concise statement of the case; the name(s) of the witness(es) the party will call to testify at the hearing; the approximate amount of time the party will need to present the party's case; and an identification of any procedural matters that need to be resolved prior to the hearing. The Pre-Hearing Statement must also be provided to me.

Thank you for your attention to this matter.

Very truly yours,

Gary W larson

OCD Case No. 16132

CHEVRON U.S.A

Exhibit #6

		•

ENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON D	ELIVERY
Complete items 1, 2, and 3. Print your name and address on the reverse	A. Signature	☐ Agent
so that we can return the card to you.	X	☐ Addressee
Attach this card to the back of the mailpiece,	B Received by (Printed Name)	C. Datte of Delivery
or on the front if space permits. Article Addressed to:	D. Is delivery address different from	item 1? Yes
COG Operating LLC	If YES, enter delivery address b	
Once Concho Center		
600 West Illinois Avenue		
Midland, TX 79701		
, , , , , , , , , , , , , , , , , , , ,		
	3. Service Type	☐ Priority Mail Express®
	☐ Adult Signature Restricted Delivery	 □ Registered Mail™ □ Registered Mail Restrict
9590 9402 3019 7124 7225 49	☐ Certified Mail® ☐ Certified Mail Restricted Delivery	Delivery Return Receipt for
Article Number (Transfer from service label)	☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery	Merchandise ☐ Signature Confirmation ^T
	I Incurad Mail	☐ Signature Confirmation
S Form 3811, July 2015 PSN 7530-02-000-9053		
ENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON I	omestic Return Receip
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3.	COMPLETE THIS SECTION ON A. Signature	omestic Return Receip
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you.	COMPLETE THIS SECTION ON A. Signature	omestic Return Receip
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece.	COMPLETE THIS SECTION ON A. Signature	omestic Return Receip
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to:	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name)	DELIVERY Agent Addresse C. Date of Deliver
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc.	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, in 6 denivery address.	DELIVERY Agent Addresse C. Date of Deliver
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc. 5 Greenway Plaza, Suite 110	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, in 6 denivery address.	DELIVERY Agent Addresse C. Date of Deliver
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc.	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name)	DELIVERY Agent Addresse C. Date of Deliver
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ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc. 5 Greenway Plaza, Suite 110	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, in 6 denivery address.	DELIVERY Agent Addresse C. Date of Deliver
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ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc. 5 Greenway Plaza, Suite 110 Houston, TX 77046	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, and densely address.	DELIVERY Agent Addresse C. Date of Deliver The priority Mail Express® Registered Mail™ Registered Mail Restricts
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc. 5 Greenway Plaza, Suite 110 Houston, TX 77046	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, into domain, address 3. Service Type Adult Signature Adult Signature Adult Signature Restricted Delivery Certified Mail®	DELIVERY Agent Addresse C. Date of Deliver Ditem 1? Priority Mail Express® Registered Mail**
ENDER: COMPLETE THIS SECTION Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: Oxy USA Inc. 5 Greenway Plaza, Suite 110 Houston, TX 77046	COMPLETE THIS SECTION ON A. Signature X B. Received by (Printed Name) D. Is delivery address different from If YES, in address, address. 3. Service Type Adult Signature Adult Signature Restricted Delivery Certified Mail® Certified Mail® Collect on Delivery Collect on Delivery Collect on Delivery	DELIVERY Agent Addresse C. Date of Deliver Deliver Priority Mail Express® Registered Mail Mail Restrict Delivery Return Receipt for



ND 11 14 FED COM 003 4H		State: New Mexico	County: Eddy		
		Township/Range: 245-31E	Section: 11/14		
me Breakdown	MARKABARAYA	i	Cost Breakdown		
ine di condouni			Project Cost		\$9,728
	Code	Cost Element	Drilling C	ompletions	Facilitie
ngibles	Code	Cost cientent		ompletions	racinti
	71900021 71900110	Casing (tangible) Wellheads (tangible)	485,000 37,380	10,500	
	71500110	Surface Lifting Equipment And Materials	37,300	10,500	
	71900020	WCR - Well Pipe - Tubing Under 2" OD			
	71900021 71900022	WCR - Well Pipe - Tubing 2" OD and Over WCR - Well Pipe Casing		50,000	
	71900100	Well Equipment And Materials		260,000	
		Battery Equipment			50
		Frac Pond Equipment Compressor Station Equipment			
		Electrical, Pipelines, Roads, Well Connect			750
tangibles					
in the state of th	00000000	Company Drilling Equipment			
	74400001	Rig Work	595,000		
	66010100 70000300	Company Labor Contract Project Supervision	135,000 32,876	105,000 60,000	
	71290100	Fuel Diesel	66,500	790,000	
	71290300	Utilities / Potable Water	5,100	1,140,925	
	71900100	Well Equipment & Materials	202		
	71900500	Materials, Parts, & Supply	84,000	620,000	
	72300100 72300200	Surface Equipment Rentals Well Service Equipment Rentals	159,974 67,830	620,000 47,500	
	73400300	Transportation Services, Land & Marine	59,850		
	73400500	Transportation Air			
	74200300 74400004	Solid Waste Disposal Drilling Fluids	73,500 85,000	550,000	
	74400004	Directional Survey & Services	143.000	330,000	
	74400007	Drill-Pipe Rental & Bits	136,000		
	74400009	Coil Tubing		250,000	
	74400010 74400011	Stimulation / Gravel Pack Material Pumping Services		1,137,285	
	74400011	Perforating			
	74400015	Slickline Services			
	74400017	Coring			
	74400018 74400019	Testing			
	74400019	Logging Wireline Logging While Drilling (LWD)			
	74400021	Logging Mud	15,000		
	74400024	Cementing			
	74400025	Fishing Services & Tools			
	74500021 74500023	Sitework / Locations Mobilization			
	74500200	Tech Services, Affiliates, & 3rd Party			
	75100500	HES, Permits, & Fees			
	76150600 71400100	Communications Telephone Chemicals and Treating Agents	6,500		
	71900120	Engineering Services (Not Drilling)			
	71900500	Materials, Supply, Repair Parts			
	73200200	Marine Transportation - Allocated			
	73400300	Other Land Transportation Services - Not Rail			
	73400400 74200300	ATC - Air Transportation Solid Waste Disposal			
	74200600	Waste Water Disposal		80,000	
	74400001	WCR - Rig Daywork			
	74400006 74400010	WCR - Directional Survey And Service Costs Stim/Gravel Pack Service (Not Materials)			
	74400010	WCR - Pumping Services		1,210,000	
	74400013	WCR - Equipment Lost In Hole			
	74400014	WCR - Perforating & Electric Line Services		430,000	
	Tangible	Intangible	Total		J. rak
ubtotal 5&A	\$1,642,880		5,840 \$9,728,720 0.0 0.0		
Total Cost	\$1,642,880				
G&A Percentage:	0.00)			
Participation & Authorization	Net Acres	Share	Amount		
Chevron U.S.A. Inc.	320	66.6666667%	56,485,813		
Devon Energy Production Company, LP	0	0.0000000%	\$0		
Douglas Cameron McLeod	40	14.58333333%	\$1,418,772		
Vladin, LLC EOG Resources Assets LLC	37.5 37.5	5.85937500% 5.85937500%	\$570,042 \$570,042		
EOG Resources Assets ELC EOG Y Resources, Inc.	30	4.68750000%	\$456,034		
	15	2.34375000%	\$228,017		
EOG A Resources, Inc.					
EOG A Resources, Inc. Approved (Prin		100.00000000% Approved (Signature			

OCD Case No. 16132

CHEVRON U.S.A. Exhibit #7

ND 11 14 FED COM 003 5H State: New Mexico County: Eddy Township/Range: 24S-31E Section: 11/14 Time Breakdown Cost Breakdo \$9,728,720 Project Cost Cost Fleme Drilling Facilities Tangibles 71900021 Casing (tangible) 71900110 Wellheads (tangible) 37.380 10.500 Surface Lifting Equipment And Materials WCR - Well Pipe - Tubing Under 2" OD 71500100 71900020 71900021 WCR - Well Pipe - Tubing 2" OD and Over 50.000 WCR - Well Pipe Casing 71900022 71900100 Well Equipment And Materials 260,000 Battery Equipment 50.000 Frac Pond Equipment Compressor Station Equipment 750 000 Electrical, Pipelines, Roads, Well Connect ntangibles 00000000 Company Drilling Equipment 74400001 595,000 Rig Work 66010100 Company Labor 135,000 105,000 60.000 70000300 Contract Project Supervision 32.876 790,000 71290100 Fuel Diesel 71290300 Utilities / Potable Water 5,100 1.140.925 71900100 Well Equipment & Materials 71900500 Materials, Parts, & Supply 72300100 Surface Equipment Rentals 159,974 67,830 620,000 47,500 72300200 Well Service Equipment Rentals 73400300 Transportation Services, Land & Marine 59,850 73400500 Transportation Air 74200300 Solid Waste Disposal 74400004 Drilling Fluids 85,000 550,000 Directional Survey & Services 143.000 74400006 74400007 Drill-Pipe Rental & Bits 74400009 Coil Tubing 250 000 Stimulation / Gravel Pack Material 1,137,285 74400010 74400011 Pumping Services Perforating Slickline Services 74400014 74400015 74400017 Coring 74400018 Testing 74400019 Logging Wireline 74400020 Logging While Drilling (LWD) 15.000 74400021 Logging Mud 74400024 Cementing 74400025 74500021 Fishing Services & Tools Sitework / Locations 74500023 Mobilization Tech Services, Affiliates, & 3rd Party HES, Permits, & Fees 74500200 75100500 76150600 Communications Telephone 6,500 71400100 Chemicals and Treating Agents Engineering Services (Not Drilling) 71900120 71900500 Materials, Supply, Repair Parts Marine Transportation - Allocated 73200200 73400300 Other Land Transportation Services - Not Rail 73400400 ATC - Air Transportation 74200300 Solid Waste Disposal 74200600 Waste Water Disposal 80,000 74400001 74400006 WCR - Rig Daywork
WCR - Directional Survey And Service Costs Stim/Gravel Pack Service (Not Materials) WCR - Pumping Services 74400010 74400011 1,210,000 74400013 WCR - Equipment Lost In Hole 430,000 WCR - Perforating & Electric Line Services 74400014 \$8,085,840 59,728,720 Subtotal \$1,642,880 G&A \$9,728,720 **Total Cost** \$1,642,880 \$8,085,840 G&A Percentage: Share Amount Participation & Authorization Net Acres 66.6666667% \$6,485,813 320 Chevron U.S.A. Inc. 0.00000000% 14.583333333% Devon Energy Production Company, LP \$1,418,772 Douglas Cameron McLeod 40 37.5 5.85937500% \$570,042 Vladin, LLC EOG Resources Assets LLC 37.5 5.85937500% \$570.042 \$456,034 4.68750000% EOG Y Resources, Inc 30 2.343750009 5228,017 EOG A Resources, Inc Approved (Print Name) Approved (Signature Date

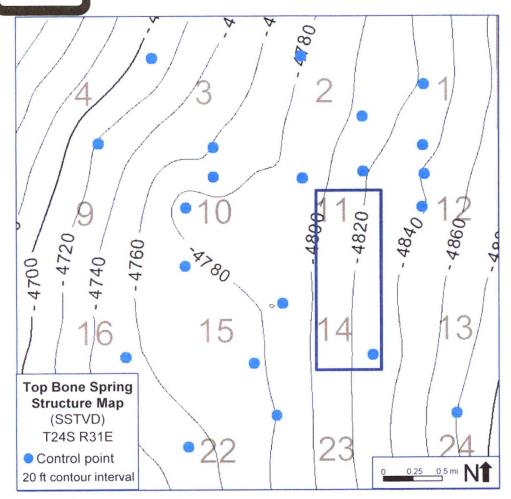
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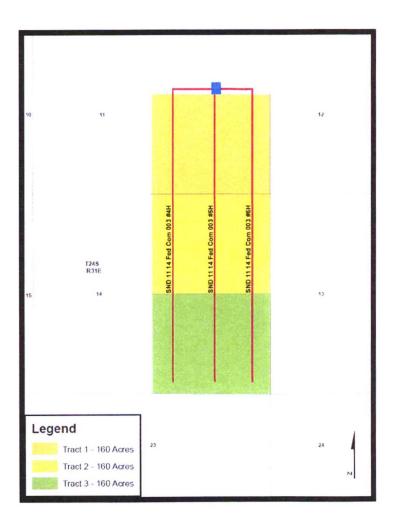
SND 11 14 FED COM 003 6H	150	State: New Mexico Township/Range: 24S-31E	Section: 11/14		
Time Breakdown			Cost Breakdown Project Cost		\$9,728,720
			· · ojeci cosi		33,123,123
	Code	Cost Element	Drilling	Completions	Facilities
Tangibles	71900021	Casing (tangible)	485,000		
	71900110	Wellheads (tangible)	37,380	10,500	
	71500100 71900020	Surface Lifting Equipment And Materials WCR - Well Pipe - Tubing Under 2" OD			
	71900021	WCR - Well Pipe - Tubing 2" OD and Over		50,000	
	71900022	WCR - Well Pipe Casing			
	71900100	Well Equipment And Materials Battery Equipment		260,000	50,000
		Frac Pond Equipment			30,000
		Compressor Station Equipment			
		Electrical, Pipelines, Roads, Well Connect			750,000
Intangibles					
	00000000 74400001	Company Drilling Equipment Rig Work	595,000		
	66010100	Company Labor	135,000	105,000	
	70000300	Contract Project Supervision	32,876	60,000	
	71290100 71290300	Fuel Diesel Utilities / Potable Water	66,500 5,100	790,000 1,140,925	
	71900100	Well Equipment & Materials	3,100	1,140,523	
	71900500	Materials, Parts, & Supply	84,000		
	72300100 72300200	Surface Equipment Rentals Well Service Equipment Rentals	159,974 67,830	620,000 47,500	
	73400300	Transportation Services, Land & Marine	59,850	47,300	
	73400500	Transportation Air			
	74200300	Solid Waste Disposal	73,500	FE0 000	
	74400004 74400006	Drilling Fluids Directional Survey & Services	85,000 143,000	550,000	
	74400007	Drill-Pipe Rental & Bits	136,000		
	74400009	Coil Tubing		250,000	
	74400010 74400011	Stimulation / Gravel Pack Material Pumping Services		1,137,285	
	74400014	Perforating			
	74400015	Slickline Services			
	74400017 74400018	Coring Testing			
	74400019	Logging Wireline			
	74400020	Logging While Drilling (LWD)			
	74400021 74400024	Logging Mud Cementing	15,000		
	74400024	Fishing Services & Tools			
	74500021	Sitework / Locations			
	74500023	Mobilization			
	74500200 75100500	Tech Services, Affiliates, & 3rd Party HES, Permits, & Fees			
	76150600	Communications Telephone	6,500		
	71400100	Chemicals and Treating Agents			
	71900120 71900500	Engineering Services (Not Drilling) Materials, Supply, Repair Parts			
	73200200	Marine Transportation - Allocated			
	73400300	Other Land Transportation Services - Not Rail			
	73400400 74200300	ATC - Air Transportation Solid Waste Disposal			
	74200600	Waste Water Disposal		80,000	
	74400001	WCR - Rig Daywork			
	74400006 74400010	WCR - Directional Survey And Service Costs Stim/Gravel Pack Service (Not Materials)			
	74400011	WCR - Pumping Services		1,210,000	
	74400013	WCR - Equipment Lost In Hole		120.000	
	74400014	WCR - Perforating & Electric Line Services		430,000	
	Tangible \$1,642,880	Intangible 58,085,84	Total 0 \$9,728,720		
Subtotal G&A	51,642,880				
Total Cost	\$1,642,88	\$8,085,84	0 \$9,728,720		
G&A Percentage:	0.0				
Participation & Authorization	Net Acres	Share	Amount		
Chevron U.S.A. Inc.	320	66.6666667%	\$6,485,813		
Devon Energy Production Company, LP	0	0.0000000%	\$1,418,772		
Douglas Cameron McLeod Vladin, LLC	40 37.5	14.58333333% 5.85937500%	\$570,042		
EOG Resources Assets LLC	37.5	5.85937500%	\$570,042		
EOG Y Resources, Inc.	30	4.68750000%	\$456,034 \$228,017		
EOG A Resources, Inc.	15	2.34375000%	\$228,017		
Approved (Pri	nt Name)	Approved (Signature			
		Date			



OCD Case No. 16132
CHEVRON U.S.A.
Exhibit #8

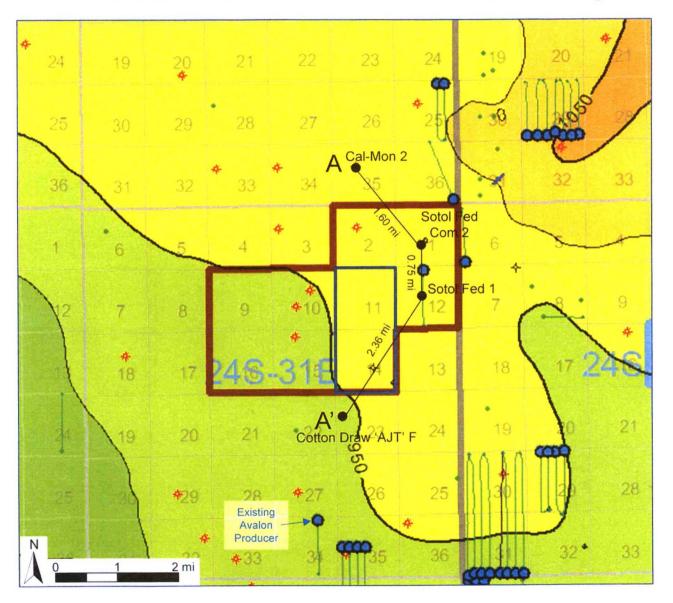
SND 11 14 Fed Com 003 (Avalon Pad)

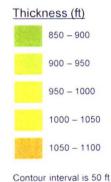






Avalon Shale Gross Thickness Map





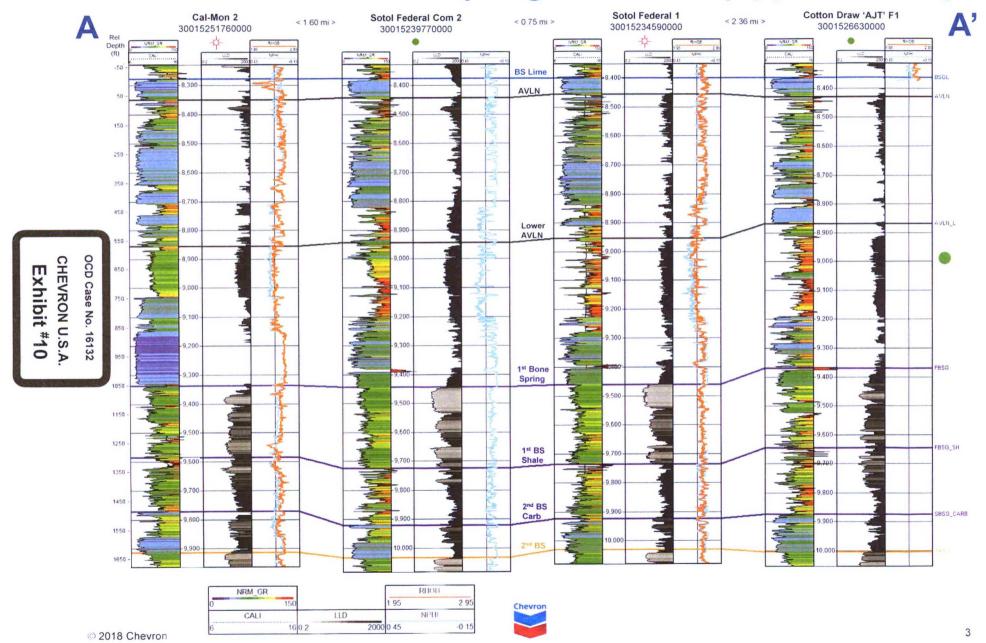


CHEVRON U.S.A

Exhibit #9

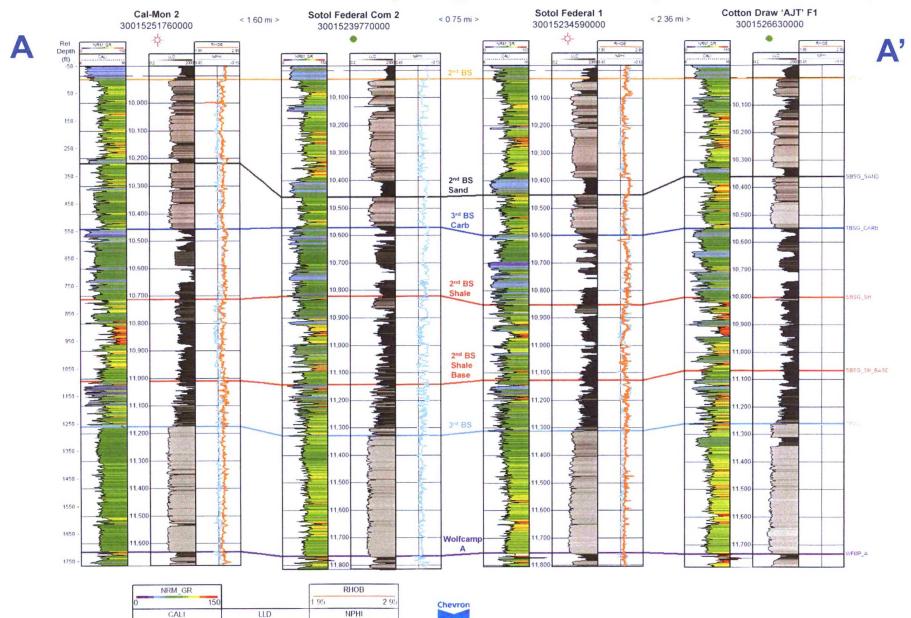
OCD Case No. 16132

Cross-Section of Bone Spring Formation (upper section)



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Cross-Section of Bone Spring Formation (lower section)

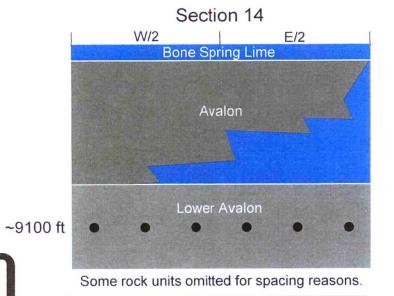


2000 0 45

-0 15

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Cross-sectional Well Bore Arrangement, Bone Spring



2nd Bone Spring Shale

"3nd Bone Spring Carbonate"

Third Bone Spring Sand

• Chevron well bore (6)

Chevron wells in W/2 of section are not part of hearing but were proposed to Tap Rock on March 13, 2018.

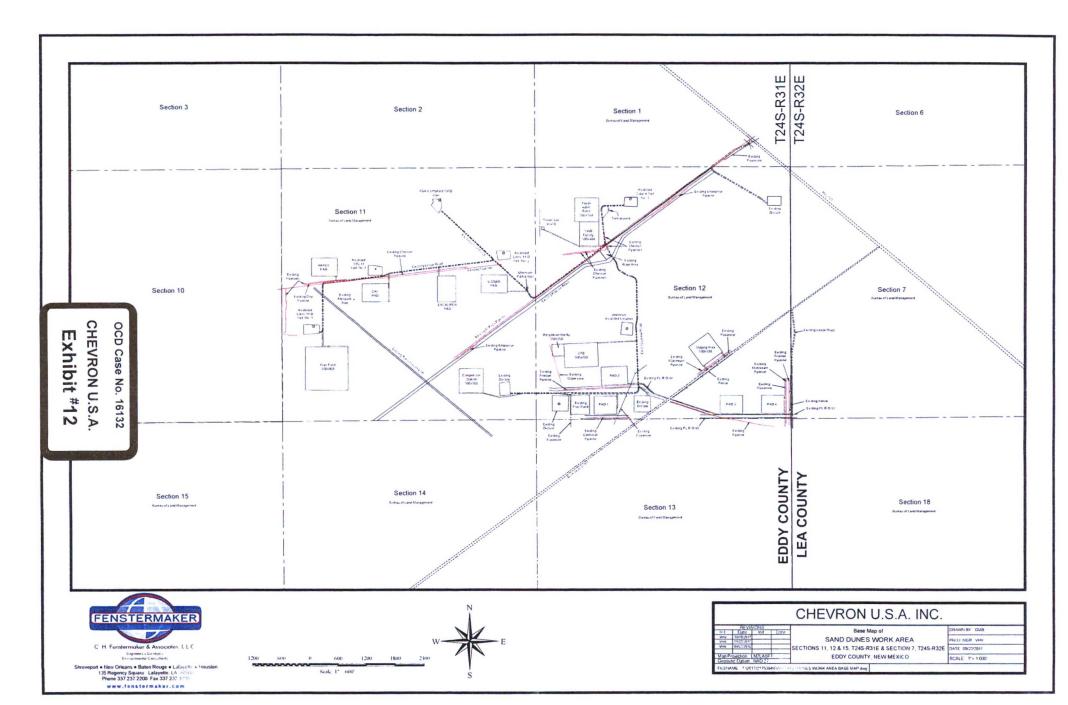
Current as of May 14th, 2018

* This is a conceptual diagram that is not to scale nor fully representative of all lithologies, as many units are heterogeneous in nature.

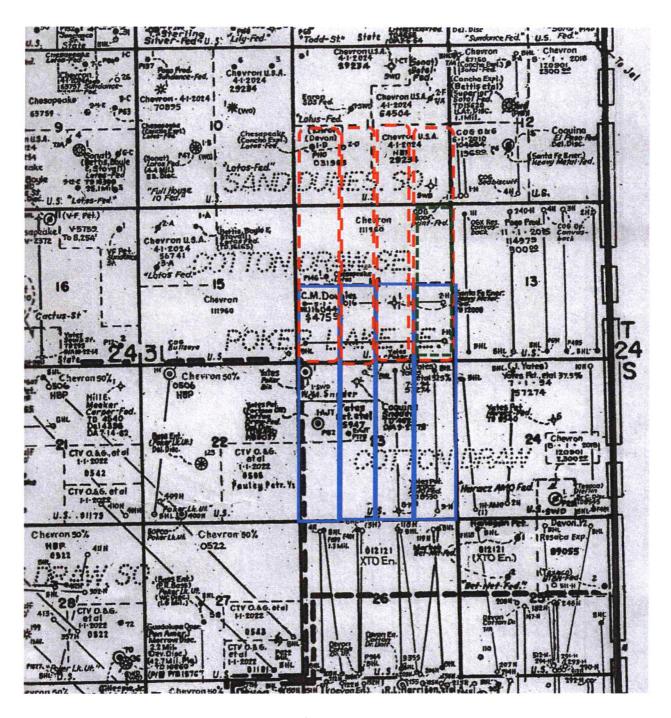


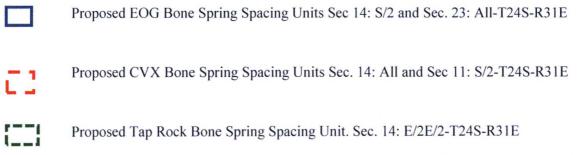
OCD Case No. 16132

Exhibit #11

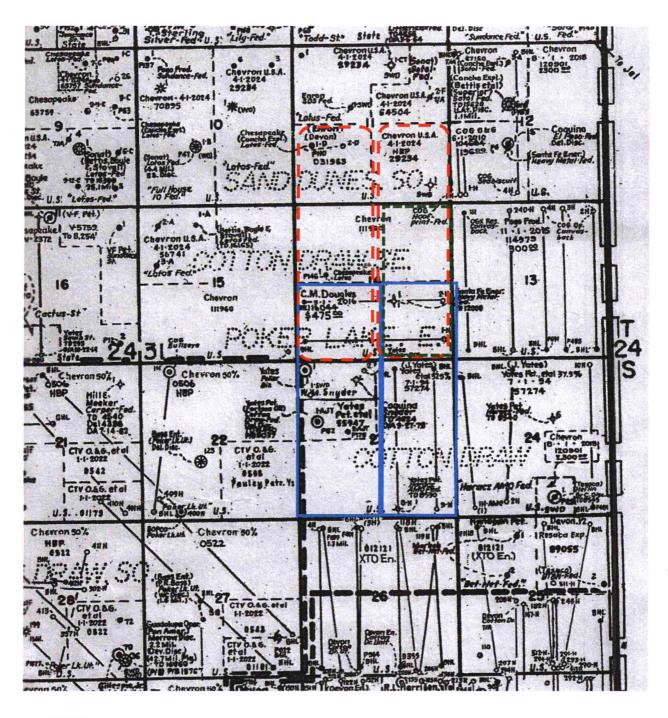


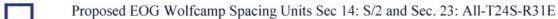
Project Areas – Bone Springs Formation EOG - Haracz 23 Federal Wells





Project Areas – Proposed Wolfcamp Formation EOG Haracz 23 Federal Wells





- Proposed CVX Wolfcamp C Spacing Units Sec. 14: All and Sec 11: S/2-T24S-R31E
- Proposed Tap Rock Wolfcamp Spacing Unit. Sec. 14: E/2E/2-T24S-R31E



Federal Express & Email

Working Interest Owners Address List Attached

e: Well Proposal – Haracz 23 Fed Com #207H

SHL: Sec. 23 - 220 FSL & 1875 FEL BHL: Sec. 14 - 2410 FSL & 1875 FEL

T24S-R-31E

Project Area: -Sec. 23: W/2E/2 Sec. 23 and W/2SE/4 Sec. 14

Eddy County, New Mexico

Gentlemen:

EOG Resources, Inc. (EOG), as Operator, proposes the drilling of the Haracz 23 Fed Com #207H as a horizontal well at the above captioned location, or a legal location as approved by the governing regulatory agency, to a TVD of approximately 9,100 feet and a MD of 16,700 feet approximately to test the Leonard formation ("Operation"). The total cost of the Operation is estimated to be \$6,700,000.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

EOG is proposing to drill this well under the terms of a 1989 AAPL form of Operating Agreement which we will provide for your review upon your indication of participation. The Operating Agreements contract lands will cover the project area. The Operating agreement is a model form with the following key provisions:

Non-consent Provisions of 100%/300%. Drilling and Producing Rates of \$7,500/\$750. EOG Resources, Inc names as Operator.

If you do not wish to participate, EOG would like to farmout your leasehold under the following industry terms of delivery of an 80.00% Net Revenue Interest for the drilling of your leasehold. This general farmout offer is subject to final EOG management approval and title acceptable to EOG Resources, Inc.

If an agreement cannot be reached within 30 days of the date of this letter, EOG will apply to the New Mexico Oil conservation Division for compulsory pooling of your interest into a spacing unit for the prose well if uncommitted at such time.

				,	7

If you have any questions, please do not hesitate to contact me at 432-686-3684.

Sincerely,

EOG Resources Inc.

Chuck Moran
Land Advisor

I/We hereby elect to participate in the Haracz 23 Fed Com #207H.

I/We hereby elect not to participate in the Haracz 23 Fed Com #207H.

Company:

By:

Its:

Date:

Address List Haracz 23 Fed Com #207H Well Proposal – AFE CE11073 Sec. 23: W/2E/2 Sec. 23 and W/2SE/4 Sec. 14

EOG Y Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG A Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG Resources Assetts LLC Attention: Land Manager 5509 Champions Drive Midland, TX 79706

Vladin LLC Attention: Jim Ball P. O. Box 100 Artesia, NM 88211-0100

Abo Empire, LLC Attention: Justin McClelland P. O. Box 900 Artesia, NM 88211-0900

Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203



MIDLAND		Printed	5/15/2018
AFE No.	CE11073		Original
Property No.	XXXXXXX-000		
EOG W.L(BCP)		(ACP)	
EOG AFE Amt:	(Drlg)		\$2,537,500
	(Land)		\$88,500
	(Completion)		\$3,432,000
	(Facility)		\$435,500
	(Flowback)		\$206,500
	Total Cost		\$6,700,000

AFE Type : DEVELOPME												
	NT DRILLING		AFE Name :	Haracz 23	Fed Com	#207H D&C	AFE Date :	4/12/2018		Budget Year	: 2018	
Reg. Lease No. : Location : Section 23-T245	D34E 220 E	C1 9 4 975 EE	Prospect Na	ime :	RED HILI	LS NORTH	TVD / MD :	9100 / 16000	#d). C41 44 T	Begin Date :	440 501 0 4 075	
Location : Section 23-1245)-R31E, 220 F3	SL & 1,8/5 FE	۲,				BHLocation :	BH(LATERAL	#1): Section 14-T	245-R31E, 2,4	410 FSL & 1,875	FEL,
Formation : Leonard B							DD&A Field :					
Operator : EOG RESOURC			County & St		EDDY / N		Fleid :	UNASSIGNED		Water Depth		
AFE Description :	COMPLETE	ed Com #207 D IN THE LEC	ONARD B FOR	TVD TO 16,7	HE WELL	IS LOCATED	IN SECTION 1	E 4/23 T245	Product :	OIL	Days :	0/0
	R31E IN EDI		JIANU DI OI	una rion. I		. IO LOOK ! LL	IN SECTION I	420, 1240,			1	
	DESCR	IDTION				SUB	DRILLING	LAND	COMPLETION	EACH PRV	I ELOWBACK I	70741
	DESCR	ur non				ACT	230	237	COMPLETION 231	FACILITY 235	FLOWBACK 236	TOTAL
ACCESS LOCATION, ROADS&SUR						401	67,000	0	5,000	0		72,0
COMP-FLBK-LOCATION AND ROA	DS					401	0	0	0	0		7,5
COMP-RIG MOVE RIG MOVE						402	0	0	5,000	0		5,0
FOOTAGE COST						402 403	180,000	0	0	0		180,0
DAY WORK COST						404	382,500	0		0		382.5
BITS & BHA						405	100,000	0	0	0		100,0
COMP-BITS & PHA COMP - FUEL						405 406	0	0		0		10,0
FUEL						406	86,000	0	200,000	0		202,5
WATER						407	18,000	0	450,000	0		468,0
COMP-FLBK-CHEMICALS						408	0	0		0		3,0
MUD & CHEMICALS CEMENTING & SERVICE						408	275,000	0	0	0		275,0
COMP- PERFORATING						409 413	180,000	0	225,000	0		180,0
COMP- STIMULATION						414	0	0	1,900,000	0		1,900,0
COMP-TRANSPORTATION						415	0	0	20,000	0		24,0
TRANSPORTATION						415	36,000	0	0	0		36,0
COMP-Completion Overhead ORILLING OVERHEAD						416 416	5,000	0	10,000	0		10,
COMP-EQUIPMENT RENTAL						417	5,000	0	110,000	0		5, 110,
FLBK-EQUIPMENT						417	135,000	0	110,000	3,000	-	163,0
RENT/OPERATIONS										5,530	25,530	
COMP-COMPLETION RIG						418	0	0	20,000	0		20,0
OTHER DRILLING EXPENSE COMP-ENVIRON & SAFETY CHARG	GES					419 421	10,000	0	25,000	0		10,0
ENVIRONMENTAL & SAFETY	500					421	15,000	0	25,000	0		15,0
DIRECTIONAL DRILLING						422	225,000	0	0	0		225,0
COMP- SUPERVISION						424	0	0	90,000	0		90,0
SUPERVISION COMP- COMMUNICATIONS						424	100,000	0	0	0		100,0
TUBULAR INSPECTION/HANDLING						431 436	15,000	0	3,500	0		3,5
COMP-CASED HOLE LOGGING/TE						438	15,555	0	3,500	0		3,5
SPECIALTY SERVICES						441	75,000	0	0	0		75.0
COMP-WIRELINE SERVICES						442	0	0	7,000	0		7,0
COMP-COIL TUBING/NITROGEN COMP-CONTRACT LABOR MISC						445 446	0	0	140,000	0		140,0
FLBK-DISPOSAL COSTS						447	110,000	0	17,000 17,000	0		17,0 217,0
COMP-COMPLETION FLUIDS						448	0	0	10,000	0		10,0
TITLE OPINION-DRILL SITE						453	0	7,500	0	0		7,5
COMP-FLOWBACK	MON					465	0	0	50,000	0	57,000	107,0
COMP-LAND DRILLSITE TITLE OPI COMP-LAND ROW DRILLING	NION					480 482	0	12,500				12,5
COMP-LAND ROW COMPLETION						483	0	12,500				12,5
COMP-LAND SURVEY & DAMAGES	S					484	0	20,000	0	0	0	20,0
DRILL												
COMP-LAND SURVEY & DAMAGES	3					485	0	20,000	0	0	0	20,0
COMP-LAND SURVEY & DAMAGES COMP COMP-REG-PERMIT FEE/ENV	3							20,000				20,0
COMP	5					486	0		0	0		20,0
OMP-REG-PERMIT FEE/ENV	5				TOTAL IN		0	20,000			0	
COMP COMP-REG-PERMIT FEE/ENV URV&ASSESS	UOM	QTY	SIZE		TOTAL IN	486	0	20,000 16,000	0	0	0	16,0
COMP- COMP-REG-PERMIT FEE/ENV UURV&ASSESS		QTY	SIZE			486 ITANGIBLES RATE 102	\$2,014,500 28,000	20,000 16,000 \$88,500	\$3,318,000 0	\$3,000	\$196,500	\$5,620,4 \$5,620,4
COMP- COMP-REG-PERMIT FEE/ENV URV&ASSESS FURFACE CASING VITERMEDIATE CASING		QTY	SIZE			486 ITANGIBLES RATE 102 103	28,000 120,000	20,000 16,000 \$88,500 0	\$3,318,000 0 0	0 \$3,000 0	\$196,500 0 0	28.0 120,0
COMP-REG-PERMIT FEE/ENV URV&ASSESS SURFACE CASING INTERMEDIATE CASING PRODUCTION CASING		QTY	SIZE			496 ITANGIBLES RATE 102 103 104	28,000 120,000 300,000	20,000 16,000 \$88,500 0 0	0 \$3,318,000 0 0	\$3,000 0 0	\$196,500	25,620,1 28,620,1 20,0 300,0
COMP COMP-REG-PERMIT FEE/ENV URV&ASSESS FURFACE CASING VITERMEDIATE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT		QTY	SIZE			486 ITANGIBLES RATE 102 103	28,000 120,000	20,000 16,000 \$88,500 0	\$3,318,000 0 0	0 \$3,000 0	\$196,500 0 0 0 0	26,0 26,0 120,0 300,0 44,0
COMP- COMP-REG-PERMIT FEE/ENV UNIVAASSESS BURFACE CASING TITEMBEDIATE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FACFLOW LINES		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107 109	28,000 120,000 300,000 0 75,000	20,000 16,000 \$88,600 0 0 0 0	0 \$3,318,000 0 0 44,000 60,000	0 \$3,000 0 0 0 0 0	0 \$196,500 0 0 0	26,6 26,6 120,6 300,6 44,1 136,6 150,0
COMP- COMP-REG-PERMIT FEE/ENV UNIVAASSESS BURFACE CASING TITEMBEDIATE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FACFLOW LINES		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107	28,000 120,000 300,000 75,000	20,000 16,000 \$88,500 0 0 0	0 \$3,318,000 0 0 44,000 60,000	0 \$3,000 0 0 0	0 \$196,500 0 0 0	26,6 26,6 120,6 300,6 44,1 136,6 150,0
COMP COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-TUBING VELLHEAD EQUIPMENT COMP-FAC-PLOW LINES COMP-FAC-VALVES & FITTINGS		QTY	SIZE			486 TANGIBLES RATE 102 103 104 106 107 109 110	28,000 120,000 300,000 0 75,000	20,000 16,000 \$88,600 0 0 0 0 0	0 \$3,318,000 0 0 44,000 60,000 0	0 \$3,000 0 0 0 0 0 150,000 31,000	\$196,500 0 0 0 0 0 0 0 0	28.1 20.1 300,0 44.1 135.1 150.0
COMP-PACE-PERMIT FEE/ENV SURV&ASSESS SURFACE CASING NTERMEDIATE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FAC-FLOW LINES COMP-FAC-VALVES & FITTINGS COMP-PALVES & FITTINGS COMP-PALVES & STORMER COMP-PALVES & FITTINGS COMP-PALVES		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107 109	28,000 120,000 300,000 0 75,000	20,000 16,000 \$88,600 0 0 0 0	0 \$3,318,000 0 0 44,000 60,000	0 \$3,000 0 0 0 0 0	\$196,500 0 0 0 0 0 0 0 0	18,620,4 28,620,4 120,6 300,6 44,1 135,6 150,0 31,6
COMP-REG-PERMIT FEE/ENV SURV&ASSESS SURFACE CASING SURFACE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FAC-FLOW LINES COMP-FAC-VALVES & FITTINGS COMP-VALVES & FITTINGS		QTY	SIZE			486 RATE 102 103 104 106 107 109 110 113	28,000 120,000 300,000 0 75,000 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0	0 \$3,318,000 0 0 0 44,000 60,000 0	0 \$3,000 0 0 0 0 150,000 31,000	0 \$196,500 0 0 0 0 0 0 0	16,620,1 28.0 120,0 300,0 44,0 135,0 150,0 31,0 7,5
COMP-REG-PERMIT FEE/ENV DURV&ASSESS SURFACE CASING INTERMEDIATE I		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107 109 110	28,000 120,000 300,000 0 75,000	20,000 16,000 \$88,600 0 0 0 0 0	0 \$3,318,000 0 0 0 44,000 60,000 0	0 \$3,000 0 0 0 0 0 150,000 31,000	0 \$196,500 0 0 0 0 0 0 0	16,6 \$5,620,1 28,1 120,1 300,1 44,1 135,5 150,1 31,1 7,5
COMP COMP-REG-PERMIT FEE/ENV URV&ASSESS SURFACE CASING TERMEDIATE CASING TOODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FAC-PLOW LINES COMP-FAC-VALVES & FITTINGS COMP-PAUMP COUIPSUBSURFACE COMP-PAC- TERMEDIATE COMP-PAC-TERMEDIATE COMP-TAC-TERMEDIATE COMP-TAC		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107 109 110 1113	28,000 120,000 300,000 0 75,000 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500	0 \$3,000 0 0 0 0 150,000 31,000 0 88,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0	28.620,1 28.620,1 120,0 300,0 44,4 135,1 150,0 31,0 7,5
COMP-PAC- COMP-		QTY	SIZE			486 RATE 102 103 104 106 107 109 110 113	28,000 120,000 300,000 0 75,000 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0	0 \$3,318,000 0 0 44,000 0 0 0 2,500 7,500	0 \$3,000 0 0 0 0 150,000 31,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0	28.620,1 28.620,1 120,0 300,0 44,4 135,1 150,0 31,0 7,5
COMP-REG-PERMIT FEE/ENV UNIVAASSESS SURFACE CASING VITERMEDIATE CASING PRODUCTION CASING COMP-TUBING VEILLHEAD EQUIPMENT COMP-FAC-FLOW LINES COMP-FAC-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-CONSTRUCTION		QTY	SIZE			486 ITANGIBLES RATE 102 103 104 106 107 109 110 1113	28,000 120,000 300,000 0 75,000 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500	0 \$3,000 0 0 0 0 150,000 31,000 0 88,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0	28.1 28.1 20.1 300.1 44.1 135.1 150.1 31.1 22.1 7.3
COMP- COMP-REG-PERMIT FEE/ENV URV&ASSESS SURFACE CASING NTERMEDIATE CASING PRODUCTION CASING COMP-TUBING VELLHEAD EQUIPMENT COMP-FAC-FLOW LINES COMP-FAC-FLOW LINES COMP-PAC-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-FAC-WALVES & FITTINGS COMP-FAC-FAC-CONSTRUCTION COST		QTY	SIZE			### ### ### ### ### ### ### ### ### ##	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500	\$3,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.4 28.620,1 20.0 300,0 44.1 135.1 150.0 31,1 7.3 88,1 24,0
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COMP-REG-PERMIT FEE/ENV DURV&ASSESS SURFACE CASING PUTERMEDIATE CASING PODUCTION LINES COMP-FAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & PODUCTION COMP-FAC-METERING COUPSUBSURFACE COMP-FAC-METERING COUPSUBSURFACE COMP-FAC-CONSTRUCTION COST COMP-FAC-CONSTRUCTION COST COMP-FAC-CABRIELEC EASS/AUTOMA		QTY	SIZE			486 iTANGIBLES RATE 102 103 104 106 107 109 110 111 115 118 122	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500	\$3,000 0 0 0 0 150,000 31,000 88,000 24,000 125,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	26.1 26.1 20.1 300,0 44.1 135.1 150,0 31,1 12.2 7.3 88,0 24,1
COMP- COMP-REG-PERMIT FEE/ENV UNIVAASSESS SURFACE CASING VITERMEDIATE CASING VITERMEDIATE CASING VIELLHEAD EQUIPMENT COMP-FAC-FLOW LINES COMP-FAC-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-CONSTRUCTION COST COMP-FAC-CONSTRUCTION COST COMP-FAC-CONSTRUCTION COST COMP-FAC-CONSTRUCTION COST COMP-FAC-CONSTRUCTION COST STRUMENT/FAC- VESTRUMENT/FAC- VESTRUM		QTY	SIZE			### ### ### ### ### ### ### ### ### ##	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500 0	\$3,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 \$196,500 0 0 0 0 0 0 0 10,000 0 0	26.1 26.1 20.1 300,0 44.1 135.1 150,0 31,1 12.2 7.3 88,0 24,1
COMP- COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-REG-PERMIT FEE/ENV COMP-TUBING COMP-TUBING COMP-TUBING COMP-FAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-FAC-CAMPTERING COMP-FAC-METERING COMP-FAC-CONSTRUCTION COMP-FAC-CAMPTELEC EASS/AUTOMA COMP-FAC-CAMPTELEC EASS/AUTOMA COMP-FAC-CAMPTELEC EASS/AUTOMA COMP-FAC-TRANSPORTATION		QTY	SIZE			### 486 ####################################	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500 0 0	\$3,000 0 0 0 0 150,000 31,000 0 0 88,000 24,000 1,000 1,000 5,000 3,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.620,1 28.620,1 28.620,1 29.630,0 300,0 44.6,1 135.6 150,0 31,1 12.1 7,3 88,0 24,0 125,0 1,6 5,6 3,0
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COMPACCONSTRUCTION COMPACC ASING DISTRIBUTION COMPACTOR OF THE COMPACT OF THE COM		QTY	SIZE			### 486 ####################################	\$2,014,500 28,000 120,000 30,000 0 75,000 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 125,000 1,000 5,000 3,000 2,500	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.1 (20.1 (
COMP-PAC-CENTRONA COMP-FAC-CONSTRUCTION COM		QTY	SIZE			### 486 ####################################	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500 0 0	\$3,000 0 0 0 0 150,000 31,000 0 0 88,000 24,000 1,000 1,000 5,000 3,000	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.1 (20.1 (
COMP COMP-REG-PERMIT FEE/ENV UNEVAASSESS UNEVACASSESS UNEVACASSES UNEVACASS		QTY	SIZE		GRADE	486 iTANGIBLES RATE 102 103 104 106 107 109 110 111 115 118 122 124 128 415 421	\$2,014,500 28,000 120,000 30,000 0 75,000 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 2,500 7,500 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 125,000 1,000 5,000 3,000 2,500	0 \$196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.1 28.1 120.1 300.0 44.1 135.1 15.0 31.1 12.1 7.1 88.1 24.1 1.5,1 5.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3
COMP- COMP-REG-PERMIT FEE/ENV UNEV&ASSESS SURFACE CASING TERMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREODUCTION CASING COMP-TUBING COMP-TUBING TERMEDIATE CASING TREODUCTION CASING TREODUCTION CASING COMP-TAGE COMP-FAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-CONSTRUCTION COMP-FAC-CONSTRUCTION COMP-FAC-VALVES TREMEDIATE COMP-FAC-VALVES COMP-FAC		QTY	SIZE		TOTAL	### ### ### ### ### ### ### ### ### ##	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 7,500 0 0 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 1,000 5,000 3,000 2,500 3,000	0 S196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.1 28.1 29.1 29.1 300,1 44.1 135,6 150,1 31,1 22.1 24,1 125,6 1,5 3,6 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7
COMP COMP-REG-PERMIT FEE/ENV UNEVAASSESS UNEVACASSESS UNEVACASSES UNEVACASS		QTY	SIZE		TOTAL	486 TANGIBLES RATE 102 103 104 106 107 109 110 113 115 118 122 124 128 415 421 471 TANGIBLES TANGIBLES TANGIBLES TANGIBLES	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0 0 0 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 7,500 0 0 0 0 0 0 0 0 0 0 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 125,000 1,000 5,000 3,00	0 S196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	28.1 28.1 29.1 29.1 300,1 44.1 135,6 150,1 31,1 22.1 24,1 125,6 1,5 3,6 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7 3,7
COMP- COMP-REG-PERMIT FEE/ENV UNEV&ASSESS SURFACE CASING TERMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREMEDIATE CASING TREODUCTION CASING COMP-TUBING COMP-TUBING TERMEDIATE CASING TREODUCTION CASING TREODUCTION CASING COMP-TAGE COMP-FAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-PAC-VALVES & FITTINGS COMP-FAC-VALVES & FITTINGS COMP-FAC-CONSTRUCTION COMP-FAC-CONSTRUCTION COMP-FAC-VALVES TREMEDIATE COMP-FAC-VALVES COMP-FAC		QTY	SIZE		TOTAL	486 TANGIBLES RATE 102 103 104 106 107 109 110 113 115 118 122 124 128 415 421 471 TANGIBLES TANGIBLES TANGIBLES TANGIBLES	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0 0 0 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 7,500 0 0 0 0 0 0 0 0 0 0 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 125,000 1,000 5,000 3,00	0 S196,500 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16,0
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OMP OMP-REG-PERMIT FEE/ENV IRV&ASSESS URFACE CASING TERMEDIATE CASING RODUCTION CASING RODUCTION CASING OMP-TUBING OMP-FAC-PLOW LINES OMP-FAC-LOW LINES STRUMENT/ELECTRIC OMP-FAC-LOW LINES OMP			Date	SIZE	TOTAL	### ### ### ### ### ### ### ### ### ##	\$2,014,500 28,000 120,000 300,000 0 75,000 0 0 0 0 0 0 0 0 0 0 0 0	20,000 16,000 \$88,600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$3,318,000 0 0 0 44,000 60,000 0 7,500 0 0 0 0 0 0 0 0 0 0 0 0	\$3,000 0 0 0 0 150,000 31,000 24,000 125,000 1,000 5,000 3,00	0 \$196,500 0 0 0 0 0 0 0 10,000 0 0 0 0 0 0 0 0	28.1 28.1 28.0 300.0 300.0 44.1 135.0 150.0 31.1 22.1 7.3 88.1 24.1 125.0 1,1 5.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3



Federal Express & Email

Working Interest Owners Address List Attached

Re:

Well Proposal - Haracz 23 Fed Com #209H

SHL: Sec. 23 - 220 FSL & 633 FEL BHL: Sec. 14 - 2410 FSL & 865 FEL

T24S-R-31E

Project Area: -Sec. 23: E/2E/2 Sec. 23 and E/2SE/4 Sec. 14

Eddy County, New Mexico

Gentlemen:

EOG Resources, Inc. (EOG), as Operator, proposes the drilling of the Haracz 23 Fed Com #209H as a horizontal well at the above captioned location, or a legal location as approved by the governing regulatory agency, to a TVD of approximately 9,100 feet and a MD of 16,700 feet approximately to test the Leonard formation ("Operation"). The total cost of the Operation is estimated to be \$6,700,000.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

EOG is proposing to drill this well under the terms of a 1989 AAPL form of Operating Agreement which we will provide for your review upon your indication of participation. The Operating Agreements contract lands will cover the project area. The Operating agreement is a model form with the following key provisions:

Non-consent Provisions of 100%/300%. Drilling and Producing Rates of \$7,500/\$750. EOG Resources, Inc names as Operator.

If you do not wish to participate, EOG would like to farmout your leasehold under the following industry terms of delivery of an 80.00% Net Revenue Interest for the drilling of your leasehold. This general farmout offer is subject to final EOG management approval and title acceptable to EOG Resources, Inc.

If an agreement cannot be reached within 30 days of the date of this letter, EOG will apply to the New Mexico Oil conservation Division for compulsory pooling of your interest into a spacing unit for the prose well if uncommitted at such time.

If you have any questions, please do not hesitate to contact me at 432-686-3684.

Sincerely,

EOG Resources Inc.

Chuck Moran
Land Advisor

I/We hereby elect to participate in the Haracz 23 Fed Com #209H.

I/We hereby elect not to participate in the Haracz 23 Fed Com #209H.

Company:

By:

Its:

Date:

Address List Haracz 23 Fed Com #209H Well Proposal – AFE CE11074 Sec. 23: E/2E/2 Sec. 23 and E/2SE/4 Sec. 14

EOG Y Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG A Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG Resources Assetts LLC Attention: Land Manager 5509 Champions Drive Midland, TX 79706

Vladin LLC Attention: Jim Ball P. O. Box 100 Artesia, NM 88211-0100

Abo Empire, LLC Attention: Justin McClelland P. O. Box 900 Artesia, NM 88211-0900

Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203



MIDLAND		Printed	5/15/2018
AFE No.	CE11074		Original
Property No.	XXXXXXX-000		
EOG W.L(BCP)		(ACP)	
EOG AFE Amt:	(Drig)		\$2,537,500
	(Land)		\$88,500
	(Completion)		\$3,432,000
	(Facility)		\$435,500
	(Flowback)		\$206,500
	Total Cost		\$6,700,000

												Total Cost	\$6,700,000
AFE Type : DEV	VELOPMEN	T DRILLING		AFE Name :	Haracz 2	3 Fed Con	n #209H D&C	AFE Date :	4/12/2018		Budget Year	r: 2018	
Reg. Lease No. :				Prospect Nar	me ;	RED HIL	LS NORTH	TVD / MD :	9100 / 16700		Begin Date :		
Location : Section	n 23-T24S-	R31E, 220 F	SL & 633 FEL	•				BHLocation:	BH(LATERAL	#1): Section 14-T	24S-R31E, 2,	410 FSL & 865 F	ĒL,
Formation : Leonar	rd B							DD&A Field :					
	RESOURCE	SINC		County & Sta	ite :	EDDY / N	IM	Field :	UNASSIGNED		Water Depth		
AFE Description :			ed Com #209					LATERAL TO B		Product :	OIL		0/0
		COMPLETE	D IN THE LEG					IN SECTION 14					
		R31E IN ED	DY CO., NM.										
		DESCR	UPTION				SUB	DRILLING	LAND	COMPLETION	FACILITY	FLOWBACK	TOTAL
							ACT	230	237	231	235	236	
ACCESS LOCATION, ROA							401	67,000	0		0		72,000
COMP-FLBK-LOCATION	AND ROAD	\$					401	0	0		0		7,500
COMP-RIG MOVE RIG MOVE							402	0			0		5,000
FOOTAGE COST							402 403	180,000	0		0		180,000
DAY WORK COST							404	382,500	0		0		382,500
BITS & BHA							405	100,000	0		0		100,000
COMP-BITS & PHA							405	0	0		0		10,000
COMP - FUEL							406	0	0	200,000	0		202,500
FUEL							406	86,000	0	0	0	0	86,000
WATER							407	18,000	0		0		468,000
COMP-FLBK-CHEMICALS	5						408	0	0		0		3,000
MUD & CHEMICALS							408	275,000	0				275,000
CEMENTING & SERVICE COMP-PERFORATING							409	180,000	0		0		180,000
COMP- PERFORATING							413	0			0		1,900,000
COMP-TRANSPORTATION	N						415	0	0		0		1,900,000
TRANSPORTATION							415	36,000	0		0		36,000
COMP-Completion Overhe	ead						416	0	0	10,000	0	0	10,000
DRILLING OVERHEAD							416	5,000	0		0		5,000
COMP-EQUIPMENT REN	TAL						417	0	0		0		110,000
FLBK-EQUIPMENT RENT/OPERATIONS							417	135,000	0	0	3,000	25,000	163,000
COMP-COMPLETION RIG							418			40.511			
OTHER DRILLING EXPEN							418	10,000	0		0		20,000
COMP-ENVIRON & SAFE		ES					421	10,000	0		0		32,500
ENVIRONMENTAL & SAF							421	15,000	0		0		15,000
DIRECTIONAL DRILLING							422	225,000	0		0		225,000
COMP-SUPERVISION							424	0	0		0		90,000
SUPERVISION							424	100,000	0	0	0		100,000
COMP-COMMUNICATION							431	0	0	3,500	0		3,500
TUBULAR INSPECTION/H COMP-CASED HOLE LOC	HANDLING	7					436	15,000	0	0	0		15,000
SPECIALTY SERVICES	GGING/TES	I .					438 441	75 000	0	3,500	0		3,500
COMP-WIRELINE SERVICES	CES						442	75,000	0		0		75,000 7,000
COMP-COIL TUBING/NITE							445	0	0		0		140,000
COMP-CONTRACT LABO							446	0	0	17,000	0		17,000
FLBK-DISPOSAL COSTS							447	110,000	0	17,000	0		217,000
COMP-COMPLETION FLU							448	0	0	10,000	0		10,000
TITLE OPINION-DRILL SIT	TÉ						453	0		0	0		7,500
COMP-FLOWBACK							465	0		50,000	0	57,000	107,000
COMP-LAND DRILLSITE 1 COMP-LAND ROW DRILL		IION					480	0					0
COMP-LAND ROW COMP							482 483	0	12,500 12,500				12,500 12,500
COMP-LAND SURVEY & D							484	0	20,000	0	0	0	20,000
DRILL							707	ľ	20,000	Ů	·	1 1	20,000
COMP-LAND SURVEY & D	DAMAGES						485	0	20,000	0	0	0	20,000
COMP													
COMP-REG-PERMIT FEE	/ENV						486	0	16,000	0	0	0	16,000
SURV&ASSESS													
						TOTAL II	TANGIBLES	\$2,014,500	\$88,500	\$3,318,000	\$3,000	\$196,500	\$5,620,500
		UOM	QTY	SIZE	SIZE	GRADE	RATE						
SURFACE CASING							102	28,000	0		0		28,000
INTERMEDIATE CASING					-		103	120,000	0		0		120,000
PRODUCTION CASING COMP-TUBING							104	300,000	0		0		300,000
WELLHEAD EQUIPMENT					-		106	75,000	0		0		44,000
COMP-FAC-FLOW LINES							107	75,000	0		150,000		135,000 150,000
COMP-FAC-VALVES & FT							110	0	0	0	31,000		31,000
								Ů	ŭ	Ů	51,000	١	31,300
COMP-VALVES & FITTING	3S						110	0	0	2,500	0		12,500
COMP-PUMP EQUIP/SUBSURFACE							113	0	0	7,500	0	0	7,500
COMP-FAC-					-	_	115	-			88.866		
COMP-FAC- HEATERS,TREATRS,SEP	PRS						115	0	0	0	88,000	0	88,000
COMP-FAC-METERING							118	0	0	0	24,000	0	24,000
EQUIPMENT							""	٥	U		24,000	1 9	24,000
COMP-FAC-CONSTRUCT	TION						122	0	0	0	125,000	0	125,000
COST													,25,500
COMP-FAC-LABR/ELEC							124	0	0	0	1,000	0	1,000
MEAS/AUTOMA													
COMP-FAC- INSTRUMENT/ELECTRIC							128	0	0	0	5,000	0	5,000
COMP-FAC-TRANSPORT							415	0	0	0	3,000		9.000
COMP-FAC-ENVIRONME					1		415	0	0	0	2,500		3,000 2,500
& SAFETY	-						74.1	١	0	,	2,500	ı "	2,300
COMP-FAC-ELECTRICAL							471	0	0	0	3,000	0	3,000
LABOR													-,
							TANGIBLES	\$523,000	\$0		\$432,500		\$1,079,500
						1	TOTAL COST	\$2,537,500	\$88,500	\$3,432,000	\$435,500	\$206,500	\$6,700,000
Ву				Date				Ву				Date	
				JOINT	OPERATOR	APPROV	/AL						
_					. 2.00101	ALLINOV		anu.	-				
Firm:				Ву				Title				Date	



Federal Express & Email

Working Interest Owners Address List Attached

Re: Well Proposal – Haracz 23 Fed Com #603H

SHL: Sec. 23 - 280 FSL & 2001 FEL BHL: Sec. 14 - 2410 FSL & 2125 FEL

T24S-R-31E

Project Area: -Sec. 23: W/2E/2 Sec. 23 and W/2SE/4 Sec. 14

Eddy County, New Mexico

Gentlemen:

EOG Resources, Inc. (EOG), as Operator, proposes the drilling of the Haracz 23 Fed Com #603H as a horizontal well at the above captioned location, or a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,730 feet and a MD of 19,300 feet approximately to test the Third Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$7,425,827.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

EOG is proposing to drill this well under the terms of a 1989 AAPL form of Operating Agreement which we will provide for your review upon your indication of participation. The Operating Agreements contract lands will cover the project area. The Operating agreement is a model form with the following key provisions:

Non-consent Provisions of 100%/300%. Drilling and Producing Rates of \$7,500/\$750. EOG Resources, Inc names as Operator.

If you do not wish to participate, EOG would like to farmout your leasehold under the following industry terms of delivery of an 80.00% Net Revenue Interest for the drilling of your leasehold. This general farmout offer is subject to final EOG management approval and title acceptable to EOG Resources, Inc.

If an agreement cannot be reached within 30 days of the date of this letter, EOG will apply to the New Mexico Oil conservation Division for compulsory pooling of your interest into a spacing unit for the prose well if uncommitted at such time.

Address List Haracz 23 Fed Com #603H Well Proposal – AFE CE11076 Sec. 23: W/2E/2 Sec. 23 and W/2SE/4 Sec. 14

EOG Y Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG A Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG Resources Assetts LLC Attention: Land Manager 5509 Champions Drive Midland, TX 79706

Vladin LLC Attention: Jim Ball P. O. Box 100 Artesia, NM 88211-0100

Abo Empire, LLC Attention: Justin McClelland P. O. Box 900 Artesia, NM 88211-0900

Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203



MIDLAND		Printed	5/15/2018
AFE No.	CE11076		Original
Property No.	XXXXXXX-000		
EOG W.L(BCP)		(ACP)	
EOG AFE Amt:	(Drig)		\$2,869,000
	(Land)		\$81,000
	(Completion)		\$3,848,327
	(Facility)		\$212,500
	(Flowback)		\$415,000
	Total Cost		\$7,425,827

AFE Type :	DEVELOPMENT DRILLING	AFE Name : Haracz	23 Fed Com #603H D&C	AFE Date :	4/12/2018	Budget Year :	2018
Reg. Lease No. :		Prospect Name :	RED HILLS NORTH	TVD / MD :	11730 / 19300	Begin Date :	
Location :	Section 23-T24S-R31E, 280 FSL & 2,001 I		BHLocation:	BH(LATERAL #1): Section 14	-T24S-R31E, 2,410 FSL	& 2,125 FEL,	
Formation :	3rd Bone Spring			DD&A Field :			
Operator :	EOG RESOURCES INC	County & State :	EDDY / NM	Field:	UNASSIGNED	Water Depth:	
AFE Description			19,300' MD IS A 1.5 MILE			OIL	Days: 0/0

1245, R31E IN EDUT CO., NM.							
DESCRIPTION	SUB	DRILLING	LAND	COMPLETION	FACILITY	FLOWBACK	TOTAL
	ACT	230	237	231	235	236	
ACCESS LOCATION, ROADS&SURVEY	401	80,000	0	5,000	0	0	85,000
COMP-FLBK-LOCATION AND ROADS	401	0	0	0	0	15,000	15,000
COMP-RIG MOVE	402	Ö	0	5,000	0		5,000
RIG MOVE	402	110,000	0	0,000	0		110,000
FOOTAGE COST	403	30,000	0		0		30,000
	404		0		0		380,000
DAY WORK COST		380,000					360,000
BITS & BHA	405	120,000	0		0		120,000
COMP-BITS & PHA	405	0	0		0		15,000
COMP - FUEL	406	0	0		0		240,832
FUEL	406	73,000	0	0	0		73,000
WATER	407	90,000	0	508,846	0	0	598,845
COMP-FLBK-CHEMICALS	408	0	0	0	0	3,000	3,000
MUD & CHEMICALS	408	360,000	0		0		360.000
CEMENTING & SERVICE	409	185,000	0		0	0	185,000
COMP- PERFORATING	413	0	0		0		262,500
	414	0					
COMP- STIMULATION		0	0		0		2,074,929
COMP-TRANSPORTATION	415		0		0		20,500
TRANSPORTATION	415	28,000	0		0		28,000
COMP-Completion Overhead	416	0	0		0		10,000
DRILLING OVERHEAD	416	5,000	0		0		5,000
COMP-EQUIPMENT RENTAL	417	0	0	80,000	0	0	80,000
FLBK-EQUIPMENT	417	125,000			3,000	65,000	193,000
RENT/OPERATIONS		.20,000		"	5,500	1	,
COMP-COMPLETION RIG	418	0	0	20,000	0	0	20,000
OTHER DRILLING EXPENSE	419	1,500			0		1,500
COMP ENGRAL & SEETY CHARGE						4.500	1,500
COMP-ENVIRON & SAFETY CHARGES	421	0	0		0		26,500
ENVIRONMENTAL & SAFETY	421	6,500	0		0		6,500
DIRECTIONAL DRILLING	422	295,000	0		0		295,000
COMP- SUPERVISION	424	0	0	119,600	0	0	119,600
SUPERVISION	424	115,000	0	0	0	4,500	119,500
COMP- COMMUNICATIONS	431	0	0		0		5,000
TUBULAR INSPECTION/HANDLING	436	10,000			0		10,000
COMP-CASED HOLE LOGGING/TEST	438	0,000	0		0	0	5,000
SPECIALTY SERVICES	441	73,000		3,000	0	0	73,000
COMP-WIRELINE SERVICES	442	0			0		7,500
COMP-COIL TUBING/NITROGEN	445	0			0		202,720
COMP-CONTRACT LABOR MISC	446	0	0		0	500	20,500
FLBK-DISPOSAL COSTS	447	28,000	0	20,000	0	245,000	293,000
COMP-COMPLETION FLUIDS	448	0	0	10,000	0	0	10,000
TITLE OPINION-DRILL SITE	453	10,000	10,000		0	0	20,000
COMP-FLOWBACK	465	0			0		105,000
COMP-LAND DRILLSITE TITLE OPINION	480	0		00,000		00,000	000,000
COMP-LAND ROW DRILLING	482	0			_		7,500
COMP-LAND ROW COMPLETION	483	0	1,000				7,500
COMP-LAND SURVEY & DAMAGES	484	0	20,000	0		0	20,000
DRILL							
COMP-LAND SURVEY & DAMAGES	485	0	20,000	0	0	0	20,000
COMP							
COMP-REG-PERMIT FEE/ENV	486	. 0	16,000	0		0	16,000
SURV&ASSESS			10,000	1		1	,
	INTANGIBLES	\$2,125,000	\$81,000	\$3,701,927	\$3,000	\$395,000	*\$6,305,927
TOTAL	INTANGIBLES	\$2,125,000	\$61,000	\$3,101,321	\$3,000	\$330,000	\$0,303,327
UOM QTY SIZE SIZE GRAD	RATE						
SURFACE CASING	102	27,000	0	0	-	0	27,000
INTERMEDIATE CASING	103	225,000		0			225,000
PRODUCTION CASING	104	460,000					460,000
COMP-TUBING	106	0			9		58,900
WELLHEAD EQUIPMENT	107	32,000			(92,000
COMP-FAC-FLOW LINES	109	0		0	16,000		16,000
COMP-FAC-VALVES & FITTINGS	110	0	0	0	31,000	0	31,000
COMP-VALVES & FITTINGS	110	0		2,500		20,000	22,500
COMP-PUMP	113	0	0	25,000		0	25,000
EQUIP/SUBSURFACE							
COMP-FAC-	115	0	0	0	88,000	0	88,000
HEATERS, TREATRS, SEPRS							
COMP-FAC-METERING	118	0	. 0	0	24,000	0	24,000
EQUIPMENT	110			1 "	24,000	1 °	24,000
COMP-FAC-CONSTRUCTION	122	0	0	0	20 000	0	96 000
	122	0	1 6	1 0	36,000	1 °	36,000
COST			-				
COMP-FAC-LABR/ELEC	124	0	0	0	1,000	0	1,000
MEAS/AUTOMA							
COMP-FAC-	128	0	0	0	5,000	0	5,000
INSTRUMENT/ELECTRIC				1			
COMP-FAC-TRANSPORTATION	415	0	0	0	3,000	0	3,000
COMP-FAC-ENVIRONMENTAL	421	0			2,500		2,500
& SAFETY	1	ľ	ľ	ľ	1	1 *	_,000
COMP-FAC-ELECTRICAL .	471	-	-	0	3,000	0	3,000
LADOR	4/1		1 "	1 0	3,000	1 "	3,000
LABOR	1				4000		A1 112
TOTAL	L TANGIBLES	\$744,000	\$0			\$20,000	\$1,119,900
1017	TOTAL COST		\$81,000	\$3,848,327	\$212,500	\$415,000	\$7,425,827

		-	D-112
Ву	Date	Ву	Date
	JOINT OPERATOR APPROVAL		
Firm :	Ву	Title	Date

		,	4



Federal Express & Email

Working Interest Owners Address List Attached

Re: Well Proposal – Haracz 23 Fed Com #615H

SHL: Sec. 23 - 220 FSL & 376 FEL BHL: Sec. 14 - 2410 FSL & 615 FEL

T24S-R-31E

Project Area: -Sec. 23: E/2E/2 Sec. 23 and E/2SE/4 Sec. 14

Eddy County, New Mexico

Gentlemen:

EOG Resources, Inc. (EOG), as Operator, proposes the drilling of the Haracz 23 Fed Com #615H as a horizontal well at the above captioned location, or a legal location as approved by the governing regulatory agency, to a TVD of approximately 11,300 feet and a MD of 19,000 feet approximately to test the Third Bone Spring formation ("Operation"). The total cost of the Operation is estimated to be \$7,425,827.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

EOG is proposing to drill this well under the terms of a 1989 AAPL form of Operating Agreement which we will provide for your review upon your indication of participation. The Operating Agreements contract lands will cover the project area. The Operating agreement is a model form with the following key provisions:

Non-consent Provisions of 100%/300%. Drilling and Producing Rates of \$7,500/\$750. EOG Resources, Inc names as Operator.

If you do not wish to participate, EOG would like to farmout your leasehold under the following industry terms of delivery of an 80.00% Net Revenue Interest for the drilling of your leasehold. This general farmout offer is subject to final EOG management approval and title acceptable to EOG Resources, Inc.

If an agreement cannot be reached within 30 days of the date of this letter, EOG will apply to the New Mexico Oil conservation Division for compulsory pooling of your interest into a spacing unit for the prose well if uncommitted at such time.

If you have any questions, please do not hesitate to contact me at 432-686-3684.

Sincerely,

EOG Resources Inc.

Chuck Moran
Land Advisor

I/We hereby elect to participate in the Haracz 23 Fed Com #615H.

I/We hereby elect not to participate in the Haracz 23 Fed Com #615H.

Company:

By:

Its:

Date:

Address List Haracz 23 Fed Com #615H Well Proposal – AFE CE11078 Sec. 23: E/2E/2 Sec. 23 and E/2SE/4 Sec. 14

EOG Y Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG A Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG Resources Assetts LLC Attention: Land Manager 5509 Champions Drive Midland, TX 79706

Vladin LLC Attention: Jim Ball P. O. Box 100 Artesia, NM 88211-0100

Abo Empire, LLC Attention: Justin McClelland P. O. Box 900 Artesia, NM 88211-0900

The Allar Company Attention: Jack Graham P. O. Box 1567 Graham, TX 76450-1567

Sonic Oil & Gas LP Attention: Land Manager P. O. Box 1240 Graham, TX 76450-7240

Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203

Oxy Y-1 Company Attention: Land Manager Permian Basin 5 Greenway Plaza, Suite 110 Houston, Texas 77046-0521



MIDLAND		Printed	5/15/2018
AFE No.	CE11078		Original
Property No.	XXXXXXX-000		
EOG W.I.(BCP)		(ACP)	
EOG AFE Amt:	(Drlg)		\$2,869,000
	(Land)		\$81,000
	(Completion)		\$3,848,327
	(Facility)		\$212,500
	(Flowback)		\$415,000
	Total Cost		\$7,425,827

AFE Type :	DEVELOPMENT DRILLING	AFE Name: Harac	z 23 Fed Com #615H D&C	AFE Date :	4/12/2018	Budget Year :	2018
Reg. Lease No. :		Prospect Name :	RED HILLS NORTH	TVD / MD :	11,300 / 19,000	Begin Date :	
Location :	Section 23-T24S-R31E, 220 FSL & 376	BHLocation: BH(LATERAL #1): Section 14-T24S-R31E, 2,410 FSL & 615 FEL,					
Formation :	3rd Bone Spring			DD&A Field :			
Operator:	EOG RESOURCES INC	County & State :	EDDY / NM	Field :	UNASSIGNED	Water Depth :	
AFE Description		3RD BONE SPRING FOR	O 19,000° MD IS A 1.5 MIL MATION. THE WELL IS L			OIL	Days: 0/0

Operator: EOG RESOURCES IN	C	County & Stat			Field :	UNASSIGNED		Water Depth OIL		0/0
CON	APLETED IN THE 3R	D BONE SPRIN	TVD TO 19,000° MD G FORMATION. TH	E WELL IS LO	CATED IN SEC	SE TION 14/23,	Product :	OIL	Days :	070
T24	S, R31E IN EDDY CO)., NM.		Leup	DRILLING	LAND	COMPLETION	FACILITY	FLOWBACK	TOTAL
	DESCRIPTION			SUB	DRILLING 230	LAND 237	231	235	236	
ACCESS LOCATION, ROADS&SURVEY				401	80,000	0	5,000	0	15,000	85,000 15,000
COMP-FLBK-LOCATION AND ROADS				401 402	0	0	5,000	0	15,000	5,000
COMP-RIG MOVE RIG MOVE				402	110,000	0	0	0	0	110,000
FOOTAGE COST				403	30,000	0	0	0		30,000
DAY WORK COST				404	380,000	0	0	0		380,000 120,000
BITS & BHA				405 405	120,000	0	15,000	0		15,000
COMP-BITS & PHA COMP - FUEL				405	0			0		240,832
FUEL				406	73,000	0		0		73,000
WATER				407	90,000	0		0		598,846 3,000
COMP-FLBK-CHEMICALS				408 408	360,000	0		0		360,000
MUD & CHEMICALS CEMENTING & SERVICE				409	185,000	0	0	0		185,000
COMP- PERFORATING				413	0	0		0		262,500
COMP- STIMULATION				414	0			0		2,074,929
COMP-TRANSPORTATION				415 415	28,000		20,000	0		28,000
TRANSPORTATION COMP-Completion Overhead				416	0	0	10,000	0		10,000
DRILLING OVERHEAD				416	5,000			0		5,000
COMP-EQUIPMENT RENTAL				417	0	0	80,000	0 000		80,000
FLBK-EQUIPMENT				417	125,000	0	0	3,000	65,000	193,000
RENT/OPERATIONS COMP-COMPLETION RIG				418	0	0	20,000	0	0	20,000
OTHER DRILLING EXPENSE				419	1,500	0	0	0	0	1,500
COMP-ENVIRON & SAFETY CHARGES				421	0	0		0	1,122	26,500
ENVIRONMENTAL & SAFETY				421	6,500			0		6,500 295,000
DIRECTIONAL DRILLING				422 424	295,000	0				119,600
COMP- SUPERVISION SUPERVISION				424	115,000			0		119,500
COMP- COMMUNICATIONS				431	0	0				5,000
TUBULAR INSPECTION/HANDLING				436	10,000	0		0		10,000 5,000
COMP-CASED HOLE LOGGING/TEST SPECIALTY SERVICES				438 441	73,000			-		73,000
COMP-WIRELINE SERVICES				442	75,000	0		- 0		7,500
COMP-COIL TUBING/NITROGEN				445	0	-				202,720
COMP-CONTRACT LABOR MISC				446	0	0				20,500 293,000
FLBK-DISPOSAL COSTS				447	28,000	0 0				10,000
COMP-COMPLETION FLUIDS TITLE OPINION-DRILL SITE				453	10,000					20,000
COMP-FLOWBACK				465	0			(55,000	105,000
COMP-LAND DRILLSITE TITLE OPINION				480	0					7,500
COMP-LAND ROW DRILLING COMP-LAND ROW COMPLETION				482 483	0					7,500
COMP-LAND SURVEY & DAMAGES				484	0	-	0		0	20,000
DRILL						20.000			0	20,000
COMP-LAND SURVEY & DAMAGES COMP				485	0					16,000
COMP-REG-PERMIT FEE/ENV SURV&ASSESS				486	0					\$6,305,927
				INTANGIBLES	\$2,125,000	\$81,000	\$3,701,927	\$3,000	\$395,000	\$6,305,827
OUDELOS OLONIO	UOM QTY	SIZE	SIZE GRAD	RATE 102	27,000				0	27,000
SURFACE CASING INTERMEDIATE CASING				103	225,000				0	225,000
PRODUCTION CASING				104	460,000				0	460,000
COMP-TUBING				106					0 0	58,900 92,000
WELLHEAD EQUIPMENT		_		107	32,000					16,000
COMP-FAC-FLOW LINES COMP-FAC-VALVES & FITTINGS		_		110						31,000
COMP-PAC-VALVES & PITTINGS										
COMP-VALVES & FITTINGS	2.		-	110					0 20,000	22,500 25,000
COMP-PUMP EQUIP/SUBSURFACE				113						88,000
COMP-FAC- HEATERS,TREATRS,SEPRS				115						24,000
COMP-FAC-METERING EQUIPMENT				118				24,00		36,00
COMP-FAC-CONSTRUCTION COST				122				36,00		
COMP-FAC-LABR/ELEC MEAS/AUTOMA				124				1,00		5,00
COMP-FAC- INSTRUMENT/ELECTRIC				128				5,00		3,00
COMP-FAC-TRANSPORTATION COMP-FAC-ENVIRONMENTAL		-	1	415				0 2,50		2,50
& SAFETY				471				0 3,00		3,00
COMP-FAC-ELECTRICAL LABOR			TOY	AL TANGIBLES						
			101	TOTAL COS						
								_	_	

Ву	Date	Ву	Date						
JOINT OPERATOR APPROVAL									
Firm:	Ву	Title	Date						



Federal Express & Email

Working Interest Owners Address List Attached

Re

Well Proposal - Haracz 23 Fed Com #715H

SHL: Sec. 23 - 220 FSL & 343 FEL BHL: Sec. 14 - 2410 FSL & 610 FEL

T24S-R-31E

Project Area: -Sec. 23: E/2 Sec. 23 and SE/4 Sec. 14

Eddy County, New Mexico

Gentlemen:

EOG Resources, Inc. (EOG), as Operator, proposes the drilling of the Haracz 23 Fed Com #715H as a horizontal well at the above captioned location, or a legal location as approved by the governing regulatory agency, to a TVD of approximately 12,050 feet and a MD of 19,700 feet approximately to test the Wolfcamp formation ("Operation"). The total cost of the Operation is estimated to be \$7,425,827.00 and a detailed description of the cost is set out in the enclosed Authority for Expenditure ("AFE").

EOG is proposing to drill this well under the terms of a 1989 AAPL form of Operating Agreement which we will provide for your review upon your indication of participation. The Operating Agreements contract lands will cover the project area. The Operating agreement is a model form with the following key provisions:

Non-consent Provisions of 100%/300%. Drilling and Producing Rates of \$7,500/\$750. EOG Resources, Inc names as Operator.

If you do not wish to participate, EOG would like to farmout your leasehold under the following industry terms of delivery of an 80.00% Net Revenue Interest for the drilling of your leasehold. This general farmout offer is subject to final EOG management approval and title acceptable to EOG Resources, Inc.

If an agreement cannot be reached within 30 days of the date of this letter, EOG will apply to the New Mexico Oil conservation Division for compulsory pooling of your interest into a spacing unit for the prose well if uncommitted at such time.

If you have any questions, please do not hesitate to contact me at 432-686-3684.

Sincerely,

EOG Resources Inc.

Chuck Moran
Land Advisor

I/We hereby elect to participate in the Haracz 23 Fed Com #715H.

I/We hereby elect not to participate in the Haracz 23 Fed Com #715H.

Company:

By:
Its:
Date:

Address List Haracz 23 Fed Com #715H Well Proposal – AFE CE11081 Sec. 23: E/2 Sec. 23 and SE/4 Sec. 14

EOG Y Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG A Resources, Inc. Attention: Land Manager 5509 Champions Drive Midland, TX 79706

EOG Resources Assetts LLC Attention: Land Manager 5509 Champions Drive Midland, TX 79706

Vladin LLC Attention: Jim Ball P. O. Box 100 Artesia, NM 88211-0100

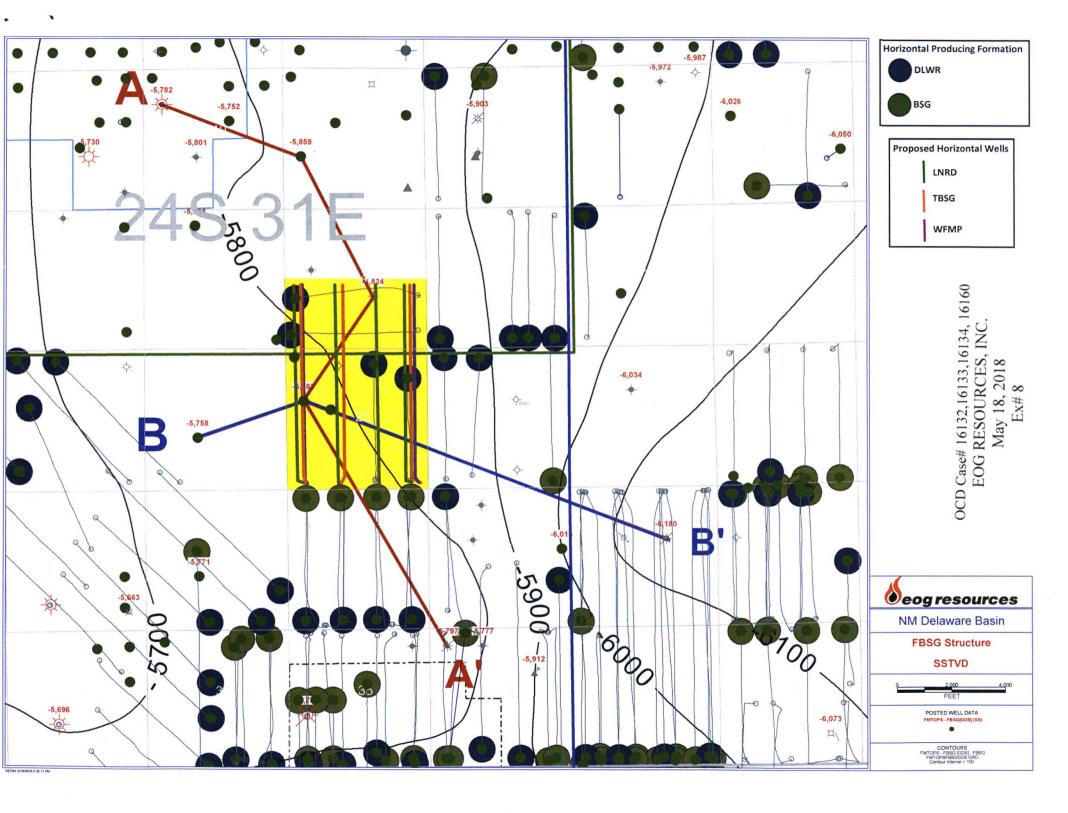
Abo Empire, LLC Attention: Justin McClelland P. O. Box 900 Artesia, NM 88211-0900

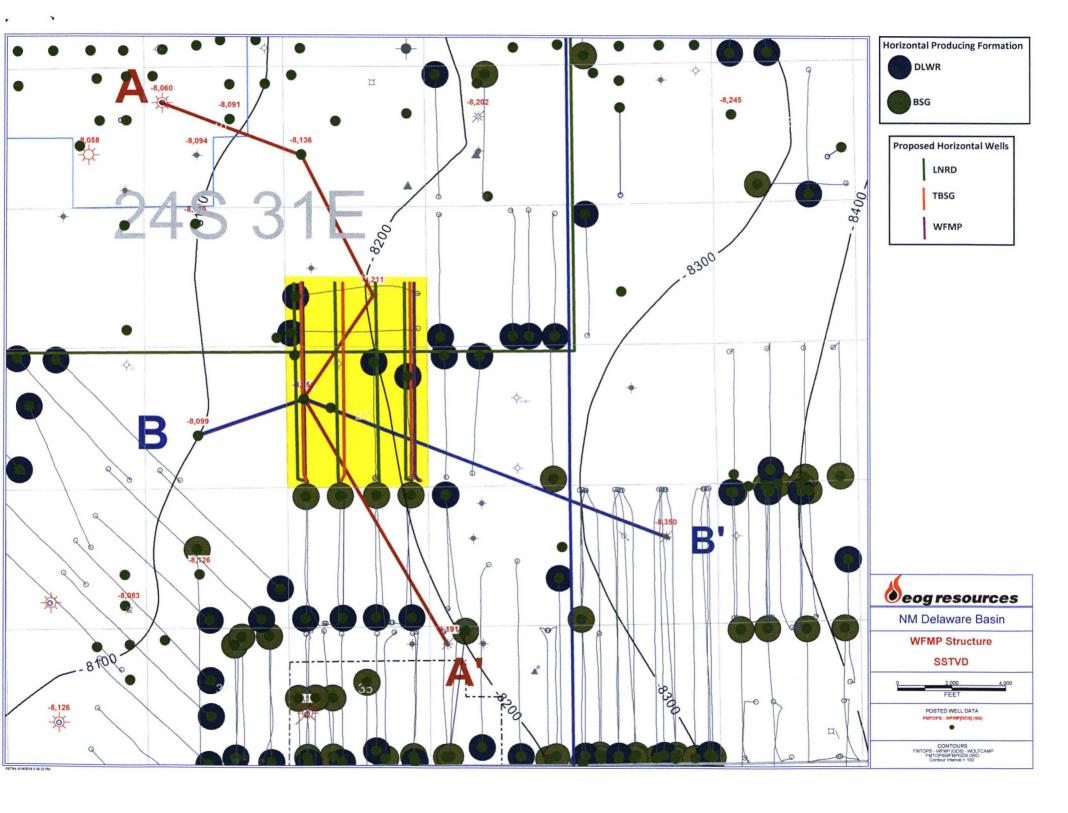
Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203

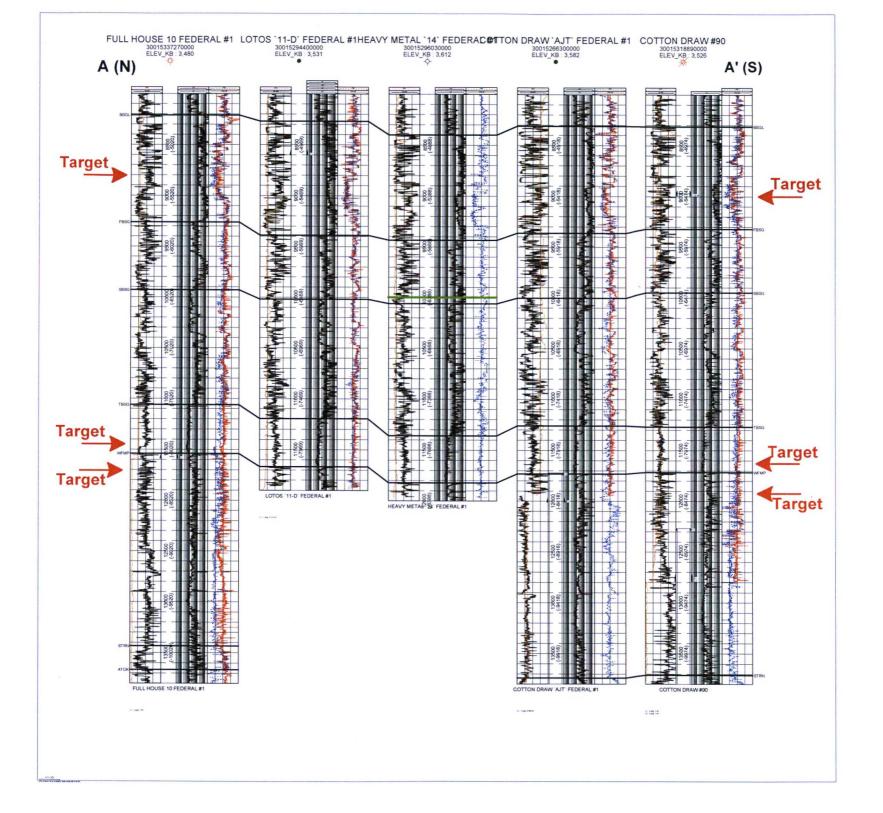


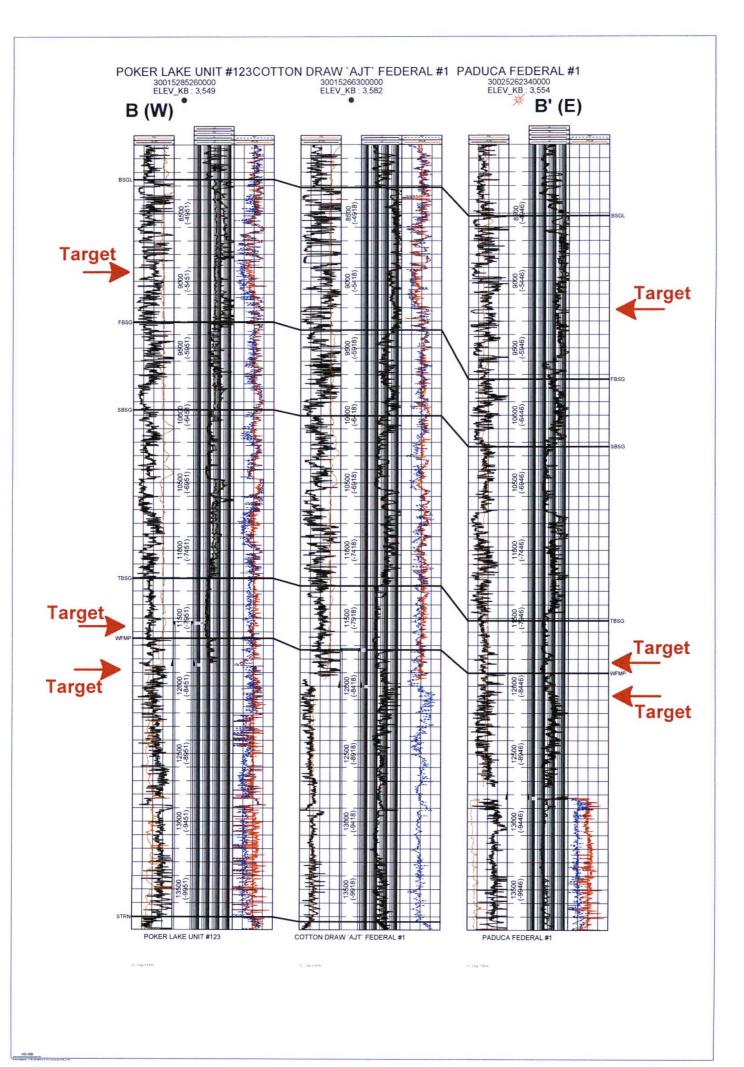
MIDLAND		Printed	5/15/2018		
AFE No.	CE11081		Original		
Property No.	XXXXXX-000				
EOG W.I.(BCP)		(ACP)			
EOG AFE Amt:	(Drig)		\$2,869,000		
	(Land)		\$81,000		
	(Completion)		\$3,848,327		
	(Facility)		\$212,500		
	(Flowback)		\$415,000		
	Total Cost		\$7,425,827		

AFE Type : DEVELOPMENT DRILLING	Type : DEVELOPMENT DRILLING AFE Name : Haracz 23 Fed Com #715H D8				FE Date: 4/12/2018 Budget Year: 2018						
Pag Lange No.	Prospect Name :	RED HILLS	S NORTH		/D / MD : 12050 / 19700 Begin Date						
Reg. Lease No. : Location : Section 23-T24S-R31E, 220 FSL & 343 FEL				HLocation: BH(LATERAL #1): Section 14-T							
				DD&A Field :							
Formation: WOLFCAMP Operator: EOG RESOURCES INC	County & State :	EDDY / NA			UNASSIGNED		Water Depth :				
ASE Description : Haracz 23 Fed Com #715	H D&C 12,050' TVD TO	19,700' MD	S A 1.5 MILE	LATERAL TO B	E	Product :	OIL	Days :	0/0		
COMPLETED IN THE WO	LECAMP FORMATION	. THE WELL	IS LOCATED	IN SECTION 14	//23, T24S,						
R31E IN EDDY CO., NM.											
DESCRIPTION			SUB	DRILLING	LAND	COMPLETION	FACILITY 235	FLOWBACK 236	TOTAL		
			401	80,000	237	5,000	0	0	85,000		
ACCESS LOCATION, ROADS&SURVEY COMP-FLBK-LOCATION AND ROADS			401	0	0	0	0	15,000	15,000		
COMP-PLBR-LOCATION AND ROADS			402	0	0	5,000	0	0	5,000		
RIG MOVE			402	110,000	0	. 0	0	0	110,000 30,000		
FOOTAGE COST			403	30,000	0	0	0	0	380,000		
DAY WORK COST			404 405	380,000 120,000	0	0	0	0	120,000		
BITS & BHA			405	120,000	0	15,000	0	0	15,000		
COMP-BITS & PHA COMP - FUEL			406	0	0	235,832	0	5,000	240,832		
FUEL			406	73,000	0	0	0	0	73,000		
WATER			407	90,000	0	508,846	0	3,000	598,846 3,000		
COMP-FLBK-CHEMICALS			408 408	360,000	0	0		0,000	360,000		
MUD & CHEMICALS			409	185,000	0	0	0	0	185,000		
CEMENTING & SERVICE COMP- PERFORATING			413	0	0	262,500	0	0	262,500		
COMP-STIMULATION			414	0		2,074,929	0	0	2,074,929		
COMP-TRANSPORTATION			415	0		20,000	0	500	20,500 28,000		
TRANSPORTATION			415	28,000		10,000	0	0	10,000		
COMP-Completion Overhead			416 416	5,000		10,000	0	0	5,000		
DRILLING OVERHEAD COMP-EQUIPMENT RENTAL			417	0,000		80,000	0	0	80,000		
FLBK-EQUIPMENT			417	125,000	0	0	3,000	65,000	193,000		
RENT/OPERATIONS								-	20,000		
COMP-COMPLETION RIG			418 419	1,500	_		0	0	1,500		
OTHER DRILLING EXPENSE			419	1,500				1,500	26,500		
COMP-ENVIRON & SAFETY CHARGES ENVIRONMENTAL & SAFETY			421	6,500				0	6,500		
DIRECTIONAL DRILLING			422	295,000	0				295,000		
COMP- SUPERVISION			424	0					119,600 119,500		
SUPERVISION			424	115,000			0		5,000		
COMP- COMMUNICATIONS			431 436	10,000			0		10,000		
TUBULAR INSPECTION/HANDLING			438	10,000					5,000		
COMP-CASED HOLE LOGGING/TEST SPECIALTY SERVICES			441	73,000	0		0		73,000		
COMP-WIRELINE SERVICES			442	C					7,500		
COMP-COIL TUBING/NITROGEN			445	C					202,720 20,500		
COMP-CONTRACT LABOR MISC			446 447	28,000					293,000		
FLBK-DISPOSAL COSTS			447	28,000					10,000		
COMP-COMPLETION FLUIDS TITLE OPINION-DRILL SITE			453	10,000			0	0	20,000		
COMP-FLOWBACK			465	(0		0	55,000	105,000		
COMP-LAND DRILLSITE TITLE OPINION			480	(-		7,500		
COMP-LAND ROW DRILLING			482						7,500		
COMP-LAND ROW COMPLETION			483 484				0	0	20,000		
COMP-LAND SURVEY & DAMAGES DRILL			404		1						
COMP-LAND SURVEY & DAMAGES			485	(20,000		0	0	20,000		
COMP								0	16,000		
COMP-REG-PERMIT FEE/ENV			486	(16,000				16,000		
SURV&ASSESS		TOTAL I	NTANGIBLES	\$2,125,000	\$81,000	\$3,701,92	\$3,000	\$395,000	\$6,305,927		
UOM QTY	SIZE SIZ	ZE GRADE		07.00		0	0 0	0	27,000		
SURFACE CASING			102	27,000			0		225,000		
INTERMEDIATE CASING PRODUCTION CASING			104	460.00		0	0 0	0	460,000		
COMP-TUBING			106		0 (58,90			58,900		
WELLHEAD EQUIPMENT			107	32,00		60,00	0 16,000		92,000 15,000		
COMP-FAC-FLOW LINES			109				0 31,000		31,000		
COMP-FAC-VALVES & FITTINGS			110		Ĭ	1	51,500				
COMP-VALVES & FITTINGS			110		0	0 2,50		20,000	22,500		
COMP-PUMP			113		0	0 25,00	0	0	25,000		
EQUIP/SUBSURFACE					0	0	0 88,000	0	88,000		
COMP-FAC-			115		4	~	00,000	1	55,560		
HEATERS, TREATRS, SEPRS		_	118		0	0	0 24,00	0	24,000		
COMP-FAC-METERING EQUIPMENT											
COMP-FAC-CONSTRUCTION			122		0	0	0 36,00	0	36,000		
COST		_	124		0	0	0 1,00	0 0	1,000		
COMP-FAC-LABR/ELEC			124		1	1	,,,,,,				
MEAS/AUTOMA COMP-FAC-			128		0	0	0 5,00	0 0	5,000		
INSTRUMENT/ELECTRIC									9.000		
COMP-FAC-TRANSPORTATION			415			0	0 3,00		3,000 2,500		
COMP-FAC-ENVIRONMENTAL			421		0	0	2,50	1	2,500		
& SAFETY		_	471	_	0	0	0 3,00	0 0	3,000		
COMP-FAC-ELECTRICAL LABOR											
LINE TO THE PARTY OF THE PARTY		TOTA	L TANGIBLE			\$146,40					
			TOTAL COS	\$2,869,00	\$81,00	\$3,848,3	\$212,50	0 \$415,000	\$7,425,827		
				T				In.u.			
Ву	Date			Ву				Date			
	JOINT OPER	ATOR APPRO	OVAL								
				1000							

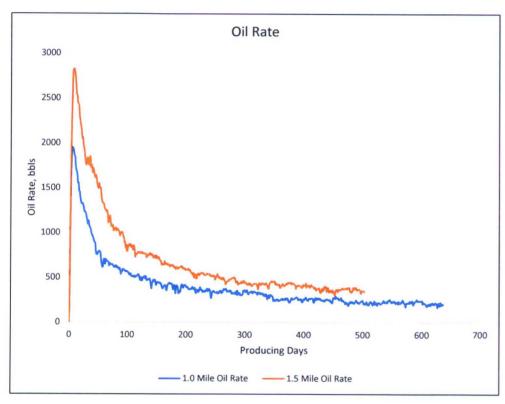


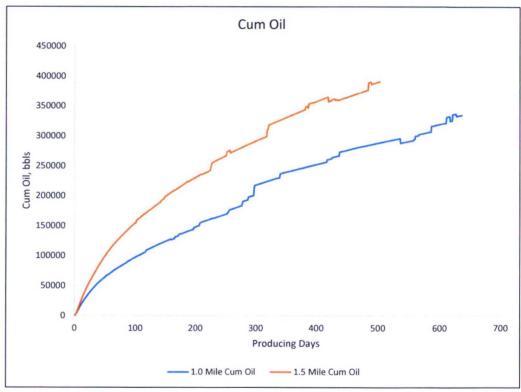




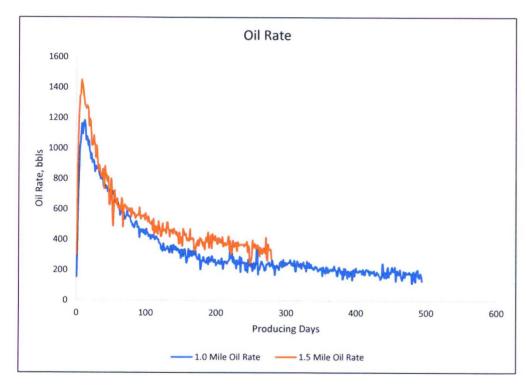


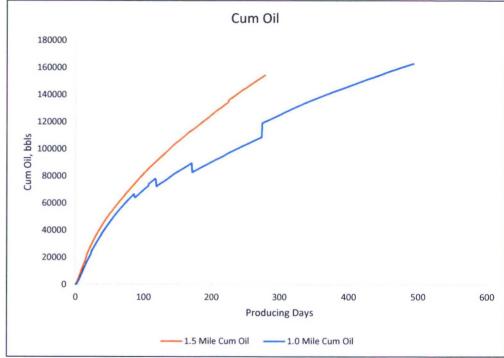
Wolfcamp



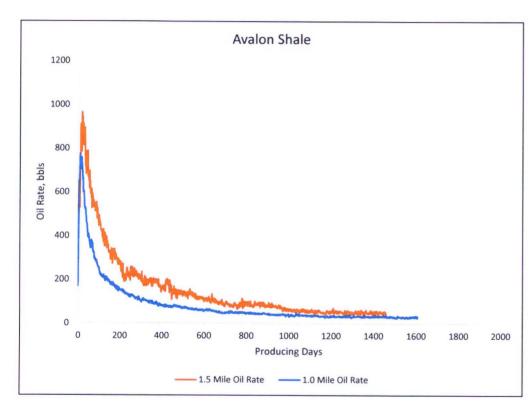


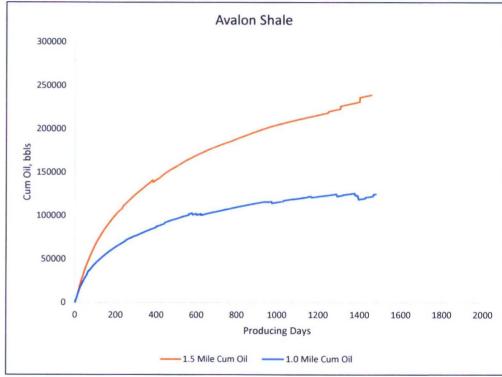
Third Bone Spring Sand





Avalon Shale





Economics

	Wolfcamp			Third Bone	!		Avalon	
	1.5 Mile	1.0 Mile		1.5 Mile	1.0 Mile		1.5 Mile	1.0 Mile
Drilling	\$2,869,000	\$2,569,000	Drilling	\$2,869,000	\$2,569,000	Drilling	\$2,537,500	\$2,250,000
Completions	\$3,848,327	\$2,848,327	Completions	\$3,848,327	\$2,848,327	Completions	\$3,432,000	\$2,432,000
Facilities	\$212,500	\$212,500	Facilities	\$212,500	\$212,500	Facilities	\$435,500	\$435,500
Land	\$81,000	\$81,000	Land	\$81,000	\$81,000	Land	\$88,500	\$88,500
Flowback	\$415,000	\$375,000	Flowback	\$415,000	\$375,000	Flowback	\$206,500	\$195,500
Total	\$7,425,827	\$6,085,827	Total	\$7,425,827	\$6,085,827	Total	\$6,700,000	\$5,401,500
TLL	7100	4500	TLL	7100	4500	TLL	7100	4500
EUR	978000	596000	EUR	646000	401000	EUR	413000	227000
EUR/FT	137.75	132.44	EUR/FT	90.99	89.11	EUR/FT	58.17	50.44
NPV10	\$18,490,204	\$9,902,476	NPV10	\$9,095,599	\$4,910,006	NPV10	\$5,588,541	\$1,699,224
NPV10/FT	\$2,604	\$2,201	NPV10/FT	\$1,281	\$1,091	NPV10/FT	\$787	\$378
Cost/FT	\$1,046	\$1,352	Cost/FT	\$1,046	\$1,352	Cost/FT	\$944	\$1,200

May 17, 2018

Chevron U.S.A. Inc. 1400 Smith Street Houston, Texas 77002

Via email

Attn: Chris Cooper

Re:

SND 11 14 Fed Com 002 4H

SND 11 14 Fed Com 002 5H

SND 11 14 Fed Com 002 6H SND 11 14 Fed Com 003 4H

SND 11 14 Fed Com 003 5H SND 11 14 Fed Com 003 6H

Township 24 South, Range 31 East

Sections 11 & 14

Eddy County, New Mexico

Dear Mr. Cooper:

By your letter of March 21, 2018, Vladin, LLC was provided with Chevron's revised AFEs for the drilling of the six Avalon formation wells referenced above. Those AFEs were approved by Vladin, LLC on April 2, 2018 and returned to you by our transmittal letter dated April 6, 2018. Chevron has provided a JOA to Vlaldin, LLC for our consideration and it is currently being reviewed.

Since the time Chevron initially proposed the wells, four competing and conflicting compulsory pooling applications potentially affecting Sections 11 and 14 (and other lands) have been filed with NMOCD by Chevron, U.S.A. Inc. and Tap Rock Resources, LLC. EOG Resources, Inc. has also submitted proposals for 34 wells to be drilled across the S/2 of Section 14 and all of Section 23. It is anticipated that EOG will also apply to NMOCD for regulatory approvals for its wells and spacing units. A consolidated hearing on the conflicting development proposals is scheduled before NMOCD on May 18, 2018. It cannot presently be determined how or when NMOCD may rule on these matters.

Needless to say, the recent developments have introduced a significant amount of uncertainty into the prospects for the future development of the lands involved and the decision-making process for all interest owners has become clouded. As a consequence, Vladin, LLC has determined that its previous approvals of Chevron's AFEs should be, and hereby are, revoked pending our assessment of the evidence to be presented at the NMOCD hearing. The approvals may be subject to reinstatement following our evaluation of all matters affecting the subject lands.

Thank you for your cooperation and understanding.

Jim Ball, Landman

Yates Holdings LLP and Vladin, LLC

NMOCD CASE Nos. 16132, 16133, 16134, 16160 Vladin, LLC

Exhibit No. 1 May 18, 2018

{01023952-1}

Phone: (432) 686-3600 Fax: (432) 686-3773

ECEIVE APR 2 6 2018

April 25, 2018

Via Federal Express/Email

Mr. Douglas McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, Colorado 80203

Re:

Plan of Development

S/2 Sec. 14 and All Sec. 23, T24S-R31E

Eddy County, New Mexico

Dear Mr. McLeod:

EOG Resources, Inc. has become aware of certain well proposals that are targeting and developing acreage in the S/2 of Sec. 14-T24S-R31E. Additionally, we understand force pooling actions are being filed with the New Mexico Oil Conservation Division. These well proposals are and force pooling actions conflict with EOG Resources plans for developing its interests in Sec. 23 and the S/2 of Sec. 14, T24S-R31E. EOG is in process of permitting wells to protect its correlative rights and will not be joining in or supporting the current proposals. Furthermore, EOG will very quickly be sending out its own well proposals that we are seeking your support of.

This letter is to inform you of EOG's development plans and provide you the ability to review our planned wells. Set forth on Exhibit A to this letter, you will find the planned Well Name, planned Surface and Bottom Hole Location, the Estimated Well Cost, Target Formation, Well's TVD and Well's MVD. In total we believe ten (10) Leonard wells, nine (9) Third Bone Spring wells, and fifteen (15) Wolfcamp wells should be drilled to adequately develop the respective formations.

EOG believes its development plans for the Bone Spring and Wolfcamp formations in the S/2 of Sec. 14 and All of Sec. 23 is the best plan for developing the lands and will yield the most recovery of reserves at a lower cost. Understanding, other operators have sent you well proposals with AFE's and that you may have signed AFE's indicating your intentions to participate, we are asking you to withdraw your signature/approval from any AFE you have signed. Further, we request you to support EOG's development plan. We will be sending well proposals shortly for the initial wells.

If you have any questions, please contact me at 432-686-3684 or by email at Charles moran@eogresources.com.

Very truly yours,

EOG RESOURCES, INC.

Chuck Moran Land Advisor

Exhibit A Haracz Wells T24S-R31E, Eddy County

Well Name	SHL Sec	SHL Call	BHL Sec	BHL Call	Target	TVD	MD	 nated Cost
Haracz 23 Fed Com #201H	23	220 FSL & 600 FWL	14	230 FNL & 360 FWL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #202H	23	220 FSL & 633 FWL	14	230 FNL & 865 FWL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #203H	23	220 FSL & 1842 FWL	14	230 NFL & 1370 FWL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #204H	23	220 FSL & 1875 FWL	14	230 FNL & 1875 FWL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #205H	23	220 FSL & 1908 FWL	14	230 FNL & 2380 FWL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #206H	23	220 FSL & 1908 FEL	14	230 FNL & 2380 FEL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #207H	23	220 FSL & 1875 FEL	14	230 FNL & 1875 FEL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #208H	23	220 FSL & 1842 FEL	14	230 FNL & 1370 FEL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #209H	23	220 FSL & 633 FEL	14	230 FNL & 865 FEL	Leonard	9,100	16,700	\$ 6,700,000.00
Haracz 23 Fed Com #210H	23	220 FSL & 600 FEL	14	230 FNL & 360 FEL	Leonard	9,100	16,700	6,700,000.00
Haracz 23 Fed Com #601H	23	220 FSL & 1033 FWL	14	230 FNL & 1115 FWL	Third Bone Spring	11,730	19,300	6,700,000.00
Haracz 23 Fed Com #602H	23	280 FSL & 2001 FWL	14	230 FNL & 2125 FWL	Third Bone Spring	11,730	19,300	6,700,000.00
Haracz 23 Fed Com #603H	23	280 FSL & 2001 FWL	14	230 FNL & 2125 FWL	Third Bone Spring	11,730	19,300	6,700,000.00
Haracz 23 Fed Com #604H	23	280 FSL & 726 FEL	14	230 FNL & 1115 FEL	Third Bone Spring	11,730	19,300	6,700,000.00
Haracz 23 Fed Com #611H	23	280 FSL & 726 FWL	14	230 FNL & 615 FWL	Third Bone Spring	11,250	19,000	6,700,000.00
Haracz 23 Fed Com #612H	23	220 FSL & 1633 FWL	14	230 FNL & 1625 FWL	Third Bone Spring	11,250	19,000	6,700,000.00
Haracz 23 Fed Com #613H	23	220 FSL & 2577 FEL	14	230 FNL & 2610 FEL	Third Bone Spring	11,300	19,000	6,700,000.00
Haracz 23 Fed Com #614H	23	220 FSL & 1633 FEL	14	230 FNL & 1625 FEL	Third Bone Spring	11,300	19,000	6,700,000.00
Haracz 23 Fed Com #615H	23	220 FSL & 376 FEL	14	230 FNL & 615 FEL	Third Bone Spring	11,300	19,000	6,700,000.00
Haracz 23 Fed Com #701H	23	220 FSL & 300 FWL	14	230' FNL & 360 FWL	Wolfcamp	13,100	19,400	8,053,827.00
Haracz 23 Fed Com #702H	23	220 FSL & 1000 FWL	14	230 FNL & 865 FWL	Wolfcamp	11,860	19,400	7,425,827.00
Haracz 23 Fed Com #703H	23	220 FSL & 1066 FWL	14	230 FNL & 1370 FWL	Wolfcamp	11,880	19,400	7,425,827.00
Haracz 23 Fed Com #704H	23	280 FSL & 1968 FWL	14	230 FNL & 1875 FWL	Wolfcamp	11,900	19,500	7,425,827.00
Haracz 23 Fed Com #705H	23	280 FSL & 2034 FWL	14	230 FNL & 2380 FWL	Wolfcamp	11,900	19,500	7,425,827.00
Haracz 23 Fed Com #706H	23	280 FSL & 2034 FEL	14	230 FNL & 2380 FEL	Wolfcamp	11,910	19,500	7,425,827.00
Haracz 23 Fed Com #707H	23	280 FSL & 1968 FEL	14	230 FNL & 1875 FEL	Wolfcamp	11,920	19,500	7,425,827.00
Haracz 23 Fed Com #708H	23	280 FSL & 759 FEL	14	230 FNL & 1370 FEL	Wolfcamp	11,930	19,500	7,425,827.00
Haracz 23 Fed Com #709H	23	280 FSL & 693 FEL	14	230 FNL & 865 FEL	Wolfcamp	11,940	19,500	7,425,827.00
Haracz 23 Fed Com #710H	23	220 FSL & 310 FEL	14	230 FNL & 360 FEL	Wolfcamp	11,950	19,550	7,425,827.00
Haracz 23 Fed Com #711H	23	280 FSL & 693 FWL	14	230 FNL & 610 FWL	Wolfcamp	12,000	19,600	7,425,827.00
Haracz 23 Fed Com #712H	23	220 FSL & 1600 FWL		230 FNL & 1620 FWL	Wolfcamp	12,000	19,600	7,425,827.00
Haracz 23 Fed Com #713H	23	220 FSL & 2610 FEL	14	230 FNL & 2610 FWL		12,000	19,600	7,425,827.00
Haracz 23 Fed Com #714H	23	220 FSL & 1600 FEL	14	230 FNL & 162 FEL	Wolfcamp	12,000	19,600	7,425,827.00
Haracz 23 Fed Com #715H	23	220 FSL & 343 FEL	14	230 FNL & 610 FEL	Wolfcamp	12,050	19,700	\$ 7,425,827.00

Douglas C. McLeod

600 Grant Street, Suite 850 Denver, CO 80203 | 303-893-5400 | dcmcleod@gmail.com

November 22, 2017

Sent via E-mail and Certified Mail Return Receipt Requested

Tap Rock Operating, LLC 602 Park Point Dr., Suite 200 Golden, CO 80410

Re: Well Proposals for Double Diamond 24S31E1414 Nos. 228H, 234H, 238H, and 224H, proposed to develop Lease NM116044, S/2 of Section 14, Township 24 South, Range 31 East, N.M.P.M., Eddy County, New Mexico, only as to those interests lying below 10,000'.

Dear Ms. Hixson:

The purpose of this letter is to present several objections to Tap Rock Operating, LLC's ("TRO") proposed development plans for the Double Diamond 24S 31E 1414 Nos. 228H, 234H, 238H and 224H wells. I have executed and enclosed herewith an AFE for each of these wells to ensure that my interests will not be carried. These elections, however, are being submitted under protest, as I have significant concerns regarding these proposals. My concerns are being raised with TRO at the outset to ensure that my correlative rights are adequately protected within the Lease, and if necessary I reserve the right to raise any concerns or objections to TRO's development plans with the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management.

I am concerned that the proposed unit for these wells will only consist of 640-acres. TRO previously represented two-mile laterals within a 1280-acre unit as ideal for the target horizons. I agree that 1280-acre spacing is the better way to develop the acreage.

I believe that it will be more cost-effective to drill two-mile laterals vs. one-mile laterals for the following reasons:

- Drilling a two-mile lateral in a 1280-acre unit will allow a seven percent greater length of open hole than the combined length of (two) one-mile laterals due the addition of 660' (2 X 330') of setback difference between the two alternatives. Assuming that a one-mile lateral has an Estimated Ultimate Recovery (EUR) of 500,000 barrels of oil, an estimated 2.1 MMBO of additional oil recovery could occur in a 1280-acre unit compared to two 640-acre units resulting from the expoitation of the setbacks. The value of this additional oil would be \$107MM at an oil price of \$50/bbl.
- 2. It appears that there are internal inconsistencies between the TRO one-mile and two-mile lateral AFEs. For example, water cost under completion on the one-mile lateral and two-mile lateral AFEs is listed at \$221,000 and \$643,500 respectively, a ratio of 0.34. For the same frac design, the ratio between these figures would be expected to be 0.46, considering the use of 21 and 46 frac stages for the one-mile and two-mile laterals as stated on the AFEs. Similar inconsistencies also occur for the Stimulation, Water Transfer/Flowback Services/Disposal, and

CTU/Workover Rig/Swab line items. The effect of these inconsistencies is to either understate the one-mile lateral AFE costs or overstate the two-mile AFE costs, which is important when comparing the two alternatives.

- 3. Even without considering the above apparent inconsistencies, based on the TRO September 12, 2017 well proposals, drilling and completion costs for a two-mile lateral were estimated at \$10.5MM. TRO's October 30, 2017 well proposals to drill and complete one-mile laterals is \$6.2MM. The combined cost for two one-mile laterals would be \$12.4MM or 18 percent more than one two-mile lateral. Multiplied by the full unit development yields a cost savings of \$57MM for development of one 1280-acre unit compared to two 640-acre units.
- 4. There is an industry trend of increasing lateral lengths in unconventional plays throughout the U.S. This has been occurring for the Bone Spring and Wolfcamp in the Permian and Delaware Basins of Texas and New Mexico. Driving the trend for increasing lateral lengths are better economics, more efficient recovery of reserves, and increased exposure of the laterals to reservoir rock and natural fractures.
- 5. The TRO Double Diamond 24S31E1414 Nos. 228H, 234H, 238H, and 224H proposals target the Wolfcamp B and Wolfcamp B lower formations, that have been sparsely drilled in this portion of Eddy County. The limited Wolfcamp completions in the area have targeted the shallower Wolfcamp A formation, as did the earlier TRO well proposals for Double Diamond 24S31E1411 #201H and #208H. The Wolfcamp B tends to be more thinly bedded and have higher shale content than the Wolfcamp A target zones.

These are significant risks that some of the Wolfcamp zones (at least four) under the lease may be economic if developed by two-mile laterals, but uneconomic with one-mile laterals. Should this be the case, 640-acre spacing would result in some zones left undeveloped, and oil left in the ground.

Therefore, drilling two-mile laterals will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

I previously signed and returned two AFE's proposed by TRO (Double #201H and #208H) based on a 1280-acre unit for the Wolfcamp. To my knowledge, these AFEs have never been rescinded and are still in effect. I object to having two sets of incompatible AFEs in effect at the same time.

I wish to resolve these concerns with TRO prior to any development taking place on the Lease. Please contact me at your convenience at 303-378-5569 to discuss the above issues. In addition, in the event compulsory pooling or other approvals are required to be obtained from the NMOCD, I request that I be notified of any such applications.

Regards,

Douglas C. McLeod

Comples CM dead

ETROGULF CORPORATION
) GRANT STREET, SUITE 850
DENVER, CO 80203

7015 3010 0002 3159 4629



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	Tap Rock Operating, LLC
7015	602 Park Point Dr., Suite 200
	Street and Apt
~	Golden, CO 80401
	City, State, ZIP
	PS Form 3800. April 2015 PSN 7530-02-000-9047 See Payorse for Instructions

Tap Rock Operating, LLC 602 Park Point Dr., Suite 200 Golden, CO 80401

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November 24, 2017, 12:31 am

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Product Information



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #224H

SHL: Sec 14, T24S, R31E - 275' FSL, 910' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 990' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,350 feet subsurface to evaluate the Wolfcamp B Formation. The proposed well will have a measured depth (MD) of approximately 17,350 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hiason

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #224H
I/We elect not to participate in the drilling and completing of the Double Diamond 24S31E1414 #224H
I/We wish to sell our interest at the terms listed herein
Company: N/A
By: My January Mc Car
Printed Name: DOUBLAS CAMERON MCLEOX
Title: DWNER
Date:
/ /

Tap Rock Operating

602 Park Point Drive - SUITE 200 - Golden, CO 80401

Phone (720) 772-5090

	ESTIMATE	OF CUSTS AND AUTH	ORIZATION FOR EXPEN	DITURE	
DATE:	October 27, 2017			AFE NO.:	XXX
WELL NAME:	Double Diamond Fed	24S31E1414 #224		FIELD:	Purple Sage
LOCATION:	Cavems			MD/TVD:	17350'/12350'
STATE	New Mexico			LATERAL LENGTH:	4,500
COUNTY	Eddy			GEOLOGIC TARGET	Wolfcamp B
				OLOLOGIC IAROLI	Woncamp B
REMARKS:	Drill and complete a h	orizontal lower Wolfo	amp with 21 stages		
			amp marar stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Logal, Regulatory, Si	urface, Survey)	41,900	3,000	PRODUCTION	44,900
Location/Pit Construction		108,000	•	8.000	116,000
Drilling (Contractor & Mob)		510,000			510,000
Comenting Services/Equips	ment	125,000			128,000
Bits/Orlil Out Assemblies		86,500	30,000		98,500
Fluid Circulation Equipmen	t/Services	47,770			47,770
Fluids/Chemicals Fluids/Cuttings/Wastewater	- Filmonat	71,000	30,000	•	101,000
Fuel/Power	Lisposai	125,000	105,000		125,000
Water		30,000	221,000		210,000 251,000
Directional Drilling, Surveys	3	151,000	221,000		151,000
Mud Logging		15,000			15,000
Logging/Formation Evaluati		-	4.500		4,500
Rig Supervision/Engineerin	g	84,000	84,400	10,000	158,400
Freight/Transportation		30,000	16,500	20,000	66,500
Labor		128,500	13,000	8,500	150,000
Supplies			34,400		34,400
Rental - Surface Equipment	ı	71,460	98,350		187,750
Rental - Living Quarters		48,200	18,680		66,280
Rontal - Downhole Equipme	Int	49,000	68.488		49,000
CTU/Workover Rig/Sweb Perforating/Wireline/Slicklin	14		80,000	-	80,000
Temporary Packers/Plugs	10		22.000	·	86,000 22,000
High Pressure Pump Truck			41,500		41,500
Stimulation			1,554,000		1,554,000
Water Transfer/Flowback Se	ervices/Disposal	7-1	145,000		145,000
Permanent Equipment Insta					
Plugging & Abandonment					
Overhead		11,000	16,000	1,500	28,500
Insuranco		31,680			31,680
Contingency		185,095	235,149	4,800	425,044
	TOTAL INTANGIBLES	: \$ 2,036,045	\$ 2,815,879	\$ 52,800	\$ 4,904,724
TANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing		4,890	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing Surface Casing		4.890 42.750	COMPLETION	PRODUCTION	4,890 42,750
Conductor Casing Surface Casing 1st Intermediate Casing		4,890 42,750 136,250	COMPLETION	PRODUCTION	4,890 42,750 138,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing		4.890 42.750 136.250 335,950	COMPLETION	PRODUCTION	4,890 42,750 136,250 335,950
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing		4,890 42,750 136,250	COMPLETION		4,890 42,750 138,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing		4,890 42,750 136,250 335,950 305,000	COMPLETION		4,890 42,750 136,250 335,950 305,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellhoad	Phon	4.890 42.750 136.250 335,950	COMPLETION		4,890 42,750 136,250 335,950
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellhoad Permanent Packers/Hanger/	/Plugs	4,890 42,750 136,250 335,950 305,000	COMPLETION	37,000	4,890 42,750 136,250 335,950 305,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhoad Permanent Packers/Hanger/ Tanks	Plugs	4,890 42,750 136,250 335,950 305,000	COMPLETION	37,000	4,890 42,750 136,250 335,950 305,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellhoad Permanent Packers/Hanger/ Tanks Production Vessels	Plugs	4,890 42,750 136,250 335,950 305,000	COMPLETION	37,000	4,890 42,750 135,250 335,950 305,000 87,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhoad Permanent Packers/Hanger/ Tanks	Plugs	4,890 42,750 136,250 335,950 305,000	COMPLETION	37,000	4,890 42,750 135,250 335,950 305,000 87,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Welihoad Permanent Packers/Hanger/ Tanks Production Vessels Compressor	(Pluga	4,890 42,750 136,250 335,950 305,000	COMPLETION	37,600 88,000 89,000	4,890 42,750 135,250 335,950 305,000 87,000 68,000 89,000
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Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Welihoad Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment		4,890 42,750 136,250 335,950 305,000	COMPLETION	37,000 88,000 89,000 25,000 25,000 25,000	4,890 42,750 135,250 335,950 305,000
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Conductor Casing Surface Casing Surface Casing 1 at Intermediate Casing 2nd intermediate Casing Production Casing Tubing Welihead Permanent Packers/Hanger/ Tanka Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurems Electrical/Grounding/Safety Permanent Equipment Instrumentation/Measurems Cother - Surface Other - Downhole TAP ROCK RESOURCES CEO CFO VP - Land & Legal	TOTAL TANGIBLES TOTAL COSTS S COMPANY APPROV RCL WRS V CS NER APPROVAL:	4.890 42.750 136.250 335.950 305,000 50,000 50,000 \$\$ 874,840 \$\$ 2,910,885 VP - Exptorati VP - Operatio	\$ 2,815,879 OnRRT rtsAMB	37,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000 \$ 471,800	4,890 42,750 135,250 335,950 305,000 87,000 88,000 89,000 25,000 25,000 25,000 12,500 8,000 111,500 111,500
Conductor Casing Surface Casing Surface Casing 1 at Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wethead Permanent Packers/Hanger/ Tanka Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment instrumentation/Measureme Cother - Downhole TAP ROCK RESOURCES CEO CFO VP - Land & Legal NON OPERATING PARTI	TOTAL TANGIBLES TOTAL COSTS S COMPANY APPROV RCL WRS V CS NER APPROVAL:	4.890 42.750 136.250 335.950 335.950 305.000 50,000 50,000 **S 874,840 **S 2,910,885 **AL: **VP - Exploration **VP - Operation **P - Business Development	\$ 2,815,879 OnRRT rtsAMB	37,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000 \$ 471,800	4,890 42,750 135,250 335,950 305,000 87,000 88,000 89,000 25,000 25,000 25,000 12,500 8,000 111,500 111,500
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Welihoad Permanent Packers/Hanger Tanks Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurems Electrical/Grounding/Safety Permanent Equipment Instal Other - Burface Cther - Downhole TAP ROCK RESOURCES CEO CFO VP - Land & Legal	TOTAL TANGIBLES TOTAL COSTS S COMPANY APPROV RCL WRS V CS NER APPROVAL:	4.890 42.750 136.250 335.950 335.950 305.000 50,000 50,000 **S 874,840 **S 2,910,885 **AL: **VP - Exploration **VP - Operation **P - Business Development	\$ 2,815,879 OnRRT rtsAMB	37,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000 \$ 471,800	4,890 42,750 135,250 335,950 305,000 87,000 88,000 89,000 25,000 25,000 25,000 12,500 8,000 111,500 111,500
Conductor Casing Surface Casing Surface Casing 1 at Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wethead Permanent Packers/Hanger/ Tanka Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment instrumentation/Measureme Cother - Downhole TAP ROCK RESOURCES CEO CFO VP - Land & Legal NON OPERATING PARTI	TOTAL TANGIBLES TOTAL COSTS S COMPANY APPROV RCL WRS CS NER APPROVAL:	4.890 42.750 138.250 335.950 335.950 305,000 50,000 50,000 50,000 \$0,	\$ 2,815,879 OnRRT rtsAMB	37,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000 \$ 471,800	4,890 42,750 135,250 335,950 305,000 87,000 88,000 89,000 25,000 25,000 25,000 12,500 8,000 111,500 111,500
Conductor Casing Surface Casing Surface Casing 1 at Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wethead Permanent Packers/Hanger/ Tarka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment instrumentation/Measureme Cother - Downhole TAP ROCK RESOURCES CEO CFO VP - Land & Legal NON OPERATING PARTI	TOTAL TANGIBLES TOTAL COSTS S COMPANY APPROV RCL WRS V CS NER APPROVAL:	4.890 42.750 136.250 335.950 335.950 305.000 50,000 50,000 **S 874,840 **S 2,910,885 **AL: **VP - Exploration **P - Business Development **P - Business D	\$ 2,815,879 OnRRT rtsAMB	37,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000 \$ 471,800	4,890 42,750 135,250 335,950 305,000 87,000 88,000 89,000 25,000 25,000 25,000 12,500 8,000 111,500 111,500



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #238H

SHL: Sec 14, T24S, R31E - 275' FSL, 800' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 330' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,850 feet subsurface to evaluate the Wolfcamp B Lower Formation. The proposed well will have a measured depth (MD) of approximately 17,850 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely, TAP ROCK OPERATING, LLC

Erica Hiason

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #238H
I/We elect not to participate in the drilling and completing of the Double Diamond 24S31E1414 #238H
I/We wish to sell our interest at the terms listed herein
Company: N/A
By: Me Comera Mc Con
Printed Name: POUBLAS CAMERON MCLEOD
Title: DWNER
Date:

	ESTIMATE	OF COSTS AND AUTH	ORIZATION FOR EXPEN	IDITURE	
DATE:	October 27, 2017			AFE NO.;	XXX
WELL NAME:	Double Diamond Fed	24S31E1414 #238		FIELD:	Purple Sage
LOCATION:	Caverns			MD/TVD:	17850/12850
STATE	New Mexico			LATERAL LENGTH:	4,500
COUNTY	Eddy			GEOLOGIC TARGET	Wolfcamp B Lower
				OLOCOGIC INVOE	Woncamp B Lower
REMARKS:	Orill and complete a h	orizontal lower Wolfc	amp with 21 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, 8	urface, Survey)	41,900	3,000	PRODUCTION	44,900
Location/Pit Construction		108,000		6,000	118,000
Orilling (Contractor & Mob)	527,000			527,000
Cementing Services/Equip	mant	128,000			128,000
Bits/Drill Out Assemblies		68,500	30,000		96,500
Fluid Circulation Equipment Fluids/Chemicals	nt/Services	49,320			49,320
Fluids/Cuttings/Wastowato	r Dianossi	71,000	30,000		101,000
Fuel/Power	i bieposi	110,000	105,000		215,000
Water		30,000	221,000		251,000
Directional Drilling, Survey	18	151,000			151,000
Mud Logging		15,000			15,000
Logging/Formation Evalua		•	4,500	•	4,500
Rig Supervision/Engineeri	ng	91,000	64,400	10,000	165,400
Freight/Transportation		30,000	16,500	20,000	66,500
Labor Supplies		128,500	13,000	8,500	150,000
Rental - Surface Equipmen	•	88,400	34,400 98 350		34,400 184,750
Rental - Living Quarters	i.	51,200	18,080		69,280
Rental - Downhole Equipm	ont	49,000			49,000
CTU/Workover Rig/Swab			60,000		80,000
Perforating/Wireline/Slicki	no		68,000	•	86,000
Temporary Packors/Pluga			22,000		22,000
High Pressure Pump Truck	•		41,500	•	41,500
Stimulation			1,554,000		1,554,000
Water Transfer/Flowback S			145.000		145,000
Permanent Equipment Inst Plugging & Abandonment	Allegon				
Overhead		11,000	18,000	1,500	28,500
Insurance		32,220			32,220
Contingency		180,204	235,149	4,800	430,153
	TOTAL INTANGIBLES	\$ 2,092,244	\$ 2,815,879	\$ 52,800	\$ 4,960,923
TANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
TANGIBLE COSTS Conductor Casing		DRILLING 4,890	COMPLETION	PRODUCTION	TOTAL COSTS 4,890
		4,890	COMPLETION	PRODUCTION	4,890 42,750
Conductor Casing Surface Casing 1st intermediate Casing		4,890 42,750 138,250	COMPLETION	PRODUCTION	4,890 42,750 136,250
Conductor Casing Surface Casing tet intermediate Casing 2nd intermediate Casing		4,890 42,750 138,250 349,450	COMPLETION	PRODUCTION	4,890 42,750 136,250 349,450
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing		4,890 42,750 138,250	COMPLETION	PRODUCTION	4,890 42,750 136,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd intermediate Casing Production Casing Tubing		4,890 42,750 138,250 349,450 312,200	COMPLETION		4,890 42,750 138,250 549,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Walihoad	riPluos	4,890 42,750 138,250 349,450	COMPLETION	PRODUCTION 37,000	4,890 42,750 136,250 349,450
Conductor Casing Surface Casing 1st Intermediate Casing 2nd intermediate Casing Production Casing Tubing	лРlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION		4,890 42,750 138,250 549,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wollhoad Parmanent Packora/Hango	riPlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Walihoad Pomenent Packors/Hango Tasks	лРlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 88,000 89,000	4,890 42,750 138,250 349,450 312,200 87,000 88,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wollhoad Permanent Peckera/Hange Tanks Production Vessels Compressor Surface Flowlines	riPlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 88,000 80,000 25,000	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wallhoad Pormanent Packors/Hango Tanks Production Vessels Compressor Surface Flowlinee Gathering Lines	riPlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 - - - - - - - - - - - - - - - - - -	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing stat intermediate Casing 2nd intermediate Casing Production Casing Tubing Weithead Parmanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlines Gathering Linos Valvee/Controllers	nPlugs	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 88,000 80,000 25,000	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wedihoad Permanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlinee Gathering Lines Artificial Lift Equipment		4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 88,000 69,000 25,000 25,000 25,000	4,890 42,750 136,250 349,450 312,280 87,000 88,000 89,000 25,000 25,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wollhoad Pomenent Pockora/Hango Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem	ient	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 - - - - - - - - - - - - - - - - - -	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wedihoad Permanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlinee Gathering Lines Artificial Lift Equipment	eent y Equipmont	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 88,000 89,000 25,000 25,000 25,000 12,500	4,890 42,750 136,250 349,450 312,200
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wollhoad Parment Packora/Hango Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface	eent y Equipmont	4,890 42,750 138,250 349,450 312,200	COMPLETION	37,000 	4,890 42,750 138,250 349,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 12,500 6,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wotifined Permanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst	rent y Equipment silation	4,890 42,750 138,250 349,450 312,200 50,000		37,060 	4,890 42,750 136,250 349,450 312,200 87,000 88,000 25,000 25,000 25,000 111,500
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wollhoad Parment Packera/Hango Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface	nent y Equipment Bilation TOTAL TANGIBLES	4,890 42,750 138,250 349,450 312,200 50,000		37,000 88,000 88,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000	4,890 42,750 138,750 349,450 312,200 87,000 88,000 89,000 25,000 25,000 11,500 8,000 111,300
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wollhoad Parment Packera/Hango Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface	rent y Equipment silation	4,890 42,750 138,250 349,450 312,200 50,000		37,060 	4,890 42,750 136,250 349,450 312,200 87,000 88,000 25,000 25,000 25,000 111,500
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wollhoad Parment Packera/Hango Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface	eent y Equipment Bilation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000 50,000		37,000 88,000 88,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000	4,890 42,750 138,750 349,450 312,200 87,000 88,000 89,000 25,000 25,000 11,500 8,000 111,300
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wedihead Parmanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Linos Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface Other - Downhole	TOTAL TANGIBLES TOTAL COSTS CS COMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000	\$ 2,816,879	37,000 	4,890 42,750 138,750 349,450 312,200 87,000 88,000 89,000 25,000 25,000 11,500 8,000 111,500 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Production Casing Tubing Wedihoad Pormanent Pockora/Hango Tanka Production Vessels Compressor Surface Flowlinee Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Pormanent Equipment Inst Other - Surface Other - Downhole	rent y Equipment allation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000 50,000	\$ \$ 2,816,879	37,000 88,000 88,000 25,000 25,000 25,000 11,500 6,000 111,500 5 419,000	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wedihead Permanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safet Permanent Equipment Inst Other - Surface Other - Downhols TAP ROCK RESOURCE	TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,784 VP - Explorate	\$ 2,815,879	37,000 	4,890 42,750 138,750 349,450 312,200 87,000 88,000 89,000 25,000 25,000 11,500 8,000 111,500 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wedihead Parmanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Linos Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface Other - Downhole	TOTAL TANGIBLES TOTAL COSTS SCOMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000	\$ 2,815,879	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Weithoad Parmanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/fleasurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhole TAP ROCK RESOURCE CEO	TOTAL TANGIBLES TOTAL COSTS SCOMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 \$ 895,540 \$ 2,987,784 VP · Explorate VP · Operate	\$ 2,815,879	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing Intermediate Casing Intermediate Casing Production Casing Tubing Wedithead Permanent Packora/Hange Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safet Permanent Equipment Inst Other - Surface Other - Downhols TAP ROCK RESOURCE	TOTAL TANGIBLES TOTAL COSTS CS COMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,784 VP - Explorate	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wolfhoad Permanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/fleasurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhols TAP ROCK RESOURCE CEO	TOTAL TANGIBLES TOTAL COSTS SCOMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 \$ 895,540 \$ 2,987,784 VP · Explorate VP · Operate	\$ 2,815,879	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wolfhoad Permanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/fleasurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhols TAP ROCK RESOURCE CEO	TOTAL TANGIBLES TOTAL COSTS CS COMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 50,000 **S 895,540 **S 2,987,784 **VP · Explorati VP · Operation **P · Business Development	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellhoad Pormenent Peckore/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrics/Grounding/Sefety Permanent Equipment Inst Other - Surface Other - Downhols TAP ROCK RESOURCE CEO VP - Land & Legal	TOTAL TANGIBLES TOTAL COSTS CS COMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 50,000 **S 895,540 **S 2,987,784 **VP · Explorati VP · Operation **P · Business Development	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing stal intermediate Casing Production Casing Tubing Weithoad Pomerent Packors/Hango Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrics//Grounding/Safet Pomsnent Equipment Inst Other - Downhols TAP ROCK RESOURCE CEO CFO VP - Land & Legal	TOTAL TANGIBLES TOTAL COSTS CS COMPANY APPROV	4,890 42,750 138,250 349,450 312,200 50,000 50,000 \$ 895,540 \$ 2,987,784 VP · Explorate VP · Operate	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wedihoad Permanent Peckora/Hange Tasks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment instrumentation/Measurem Electrical/Grounding/Sefety Permanent Equipment Inst Other - Surface Other - Downhols TAP ROCK RESOURCE CEO VP - Land & Legal	TOTAL TANGIBLES TOTAL COSTS COMPANY APPROV RCL WRS TNER APPROVAL:	4,890 42,750 138,250 349,450 312,200 50,000 50,000 50,000 **S 895,540 **S 2,987,784 **VP · Explorati VP · Operation **P · Business Development	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing stel intermediate Casing Production Casing Tubing Wedihead Permanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhole TAP ROCK RESOURCE TAP ROCK RESOURCE VP - Land & Legal NON OPERATING PAR'	TOTAL TANGIBLES TOTAL COSTS ES COMPANY APPROV RCL WRS TNER APPROVAL: DOUGLAS	4,890 42,750 138,250 349,450 312,200 50,000 50,000 50,000 \$ 2,887,784 VP - Explorat VP - Operate P - Business Development	\$ 2,816,879 \$ 2,816,879 AAKB ent SG	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wollhoad Permanent Peckora/Hange Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/fleasurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhole TAP ROCK RESOURCE CEO CFO VP - Land & Legal NON OPERATING PAR'	TOTAL TANGIBLES TOTAL COSTS COMPANY APPROV RCL WRS TNER APPROVAL:	4,890 42,750 138,250 349,450 312,200 50,000 50,000 50,000 **S 895,540 **S 2,987,784 **VP · Explorati VP · Operation **P · Business Development	\$ 2,816,879 S 2,816,879 RRT AMB	37,000 	4,890 42,750 138,750 138,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,300 \$ 1,314,540 \$ 8,275,463



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #234H

SHL: Sec 14, T24S, R31E - 275' FSL, 940' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 990' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,850 feet subsurface to evaluate the Wolfcamp B Lower Formation. The proposed well will have a measured depth (MD) of approximately 17,850 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #234H
I/We elect not to participate in the drilling and completing of the Double Diamond 24S31E1414 #234H
I/We wish to sell our interest at the terms listed herein
Company: DOUBLAS CAMERON MCLEOD
By: / Marin Mely
Printed Name: PONBLAS CAMERON MCLEDD
Title: DWNER
Date: 11/14/2017

Tap Rock Operating

602 Park Point Drive • SUITE 200 • Golden, CO 80401

Phone (720) 772-5090

		OF COSTS AND AUTHO	THE THOUSANT BY	DITORE	
DATE:	October 27, 2017			AFE NO.:	XXX
WELL NAME:	Double Diamond Fed	24S31E1414 #234		FIELD:	Purple Sage
LOCATION:	Caverns			MD/TVD:	17850'/12850'
STATE	New Mexico			LATERAL LENGTH:	4,500
COUNTY	Eddy			GEOLOGIC TARGET	Wolfcamp B Lower
ood.	Looy			GEOLOGIC TARGET	Wollcarily & Lower
REMARKS:	Drill and complete a h	orizontal lower Wolfca	mp with 21 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, S	urface, Survey)	41,900	3,000	•	44,900
Location/Pit Construction	••	108,000	-	8,000	118,000
Drilling (Contractor & Mob		527,000			527,000
Cementing Services/Equip	ment	126,000			126,000
Bits/Drill Out Assemblies		66,500	30,000		96,500
Fluid Circulation Equipmen	nt/Services	49,320			49,320
Fluids/Chemicals	n Diagonal	71,000	30,000		101,000
Fluids/Cuttings/Wastewate Fuel/Power	r Disposei	125,000	105,000		125,000
Water		30,000	221,000		251,000
Directional Orilling, Survey	rs.	151,000	221,000		151,000
Mud Logging		15,000			15,000
Logging/Formation Evalua	tion	-	4,500		4,500
Rig Supervision/Engineering		91,000	64,400	10,000	165,400
Freight/Transportation		30,000	16,500	20,000	68,500
Labor		128,500	13,000	8,500	150,000
Supplies		•	34,400		34,400
Rentzi - Surfaço Equipmen	t	88,400	96,350		184,750
Rentzi - Living Quarters		51,200	18,080		69,280
Rental - Downholo Equipm	ent	49,000		•	49,000
CTUMorkover RigiSwab			80,000		80,000
Perforating/Wireline/Stickii	ne		86,000	•	86,000
Temporary Packers/Plugs			22,000		22,000
High Pressure Pump Truck	•		41,500		41,500
Stimulation			1,554,000		1,554,000
Water Transfer/Flowback S			145,000		145,000
Permanent Equipment Inst	allation				
Plugging & Abandonment					
Overhead		11,000	18,000	1,500	28,500
Insurance		32,220	ANT TIM	1.688	32,220
Contingency		190,204	235,149	4,600	430,153
	TOTAL INTANGIBLES	: \$ 2,092,244	\$ 2,815,879	\$ 52,800	\$ 4,960,923
					the second secon
TANGIBLE COSTS		ORILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing		4,890	COMPLETION	PRODUCTION	4,990
Conductor Casing Surface Casing		4,890 42,750	COMPLETION	PRODUCTION	4,890 42,750
Conductor Casing Surface Casing tat Intermediate Casing		4,890 42,750 138,250	COMPLETION	PRODUCTION	4,890 42,750 138,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing		4,890 42,750 136,250 349,450	COMPLETION	PRODUCTION	4,890 42,750 138,250 349,450
Conductor Casing Surface Casing tal Intermediate Casing 2nd Intermediate Casing Production Casing		4,890 42,750 138,250	COMPLETION	PRODUCTION	4,890 42,750 138,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing		4,890 42,750 136,250 349,450 312,200	COMPLETION		4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st Intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellhead		4,890 42,750 136,250 349,450		PRODUCTION 37,000	4,890 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing ist Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packors/Hange	r/Plugs	4,890 42,750 136,250 349,450 312,200	COMPLETION	37,000	4,590 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hange Tanks	r/Plugs	4,890 42,750 136,250 349,450 312,200		37.000	4,590 42,750 138,250 349,450 312,200 87,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hange Tanks Production Vessels	riPlugs	4,890 42,750 136,250 349,450 312,200		37,000	4,590 42,750 138,250 349,450 312,200
Conductor Casing Surface Casing stal intermediate Casing 2nd intermediate Casing Production Casing Trobuction Casing Weithead Permanent Packora/Hange Tanka Production Vessels Compressor	nPlugs	4,890 42,750 136,250 349,450 312,200		\$7,600 88,000 69,000	4,590 42,750 138,250 349,450 312,200 67,000 88,000
Conductor Casing Surface Casing surface Casing Int Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Parmanent Packers/Hanger Tanks Production Vessels Compressor Surface Flowlines	r/Plugs	4,890 42,750 136,250 349,450 312,200		37.000 88.000 69.000	4,590 42,750 138,250 349,450 312,200 87,000 88,000 89,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Wellman Permanent Packers/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines	riPlugs	4,890 42,750 136,250 349,450 312,200		37.000 88.000 69.000 25,000 25,000	4,890 42,750 138,250 349,450 312,200 87,000 88,000 89,000 25,000 25,000
Conductor Casing Surface Casing surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers	r/P lugs	4,890 42,750 136,250 349,450 312,200		37.000 88.000 69.000	4,590 42,750 138,250 349,450 312,200 87,000 88,000 89,000
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hanger Tanks Production Vessels Compressor Surface Flowlines Getterting Lines Valves/Controllers Artificial Lift Equipment		4,890 42,750 136,250 349,450 312,200		37,000 88,000 69,000 25,000 25,000 25,000	4,590 42,750 138,250 549,450 312,200 67,000 88,000 89,000 25,000 25,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem	ent	4,890 42,750 136,250 349,450 312,200		37.000 88.000 69.000 25,000 25,000	4,590 42,750 138,250 349,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000
Conductor Casing Surface Casing Surface Casing 1st intermediate Casing 2nd intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/flessurem Electrical/Grounding/Safeh	ent y Equipment	4,890 42,750 136,250 349,450 312,200		37,000 88,000 69,000 25,000 25,000 25,000 12,500 6,000	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 25,000 12,500 6,000
Conductor Casing Surface Casing 1st intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem	ent y Equipment	4,890 42,750 136,250 349,450 312,200		37.000 	4,590 42,750 138,250 349,450 312,200 87,000 88,000 89,000 25,000 25,000 25,000
Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Inst	ent y Equipment	4,890 42,750 136,250 349,450 312,200		37,000 88,000 69,000 25,000 25,000 25,000 111,500	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 25,000 12,500 6,000
Conductor Casing Surface Casing surface Casing and intermediate Casing 2nd intermediate Casing Production Casing Tubing Weilhead Permanent Packara/Hanger Tanks Production Vesaels Compressor Surface Flowlines Gettvering Lines ValvessControllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Sefeh Permanent Equipment Inst	ent y Equipment	4,890 42,750 136,250 349,450 312,200 50,000		37,000 88,000 69,000 25,000 25,000 25,000 111,500	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 25,000 12,500 6,000
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Instrumentation/Interment Instrumentation/Interment Instrumentation/Interment	ent y Equipment allation TOTAL TANGIBLES	4,890 42,750 136,250 349,450 312,200 50,000		37,000 88,000 69,000 25,000 25,000 25,000 111,500 6,000 111,500	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 12,500 6,000 111,500
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Tubing Weilhead Permanent Packara/Hanger Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Surface Other - Downhole	ent / Equipment allation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000		37,000 88,000 69,000 25,000 25,000 25,000 12,500 6,000	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 25,000 111,500 111,500
Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Inst	ent / Equipment allation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000		37,000 88,000 69,000 25,000 25,000 25,000 111,500 6,000 111,500	4,590 42,750 138,250 349,450 312,200 67,000 68,000 25,000 25,000 12,500 6,000 111,500
Conductor Casing Surface Casing surface Casing and Intermediate Casing Production Casing Tubing Weilhead Permanent Packars/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhole	ent y Equipment silation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 138,250 349,450 312,200 50,000	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 25,000 111,500 6,000 111,500	4,590 42,750 138,250 349,450 312,200 67,000 88,000 25,000 25,000 25,000 111,500 6,000 111,500 5 1,314,640 \$ 6,275,463
Conductor Casing Surface Casing surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Dewnhole TAP ROCK RESOURCE	TOTAL TANGIBLES TOTAL COSTS SCOMPANY APPROV	4,890 42,750 136,250 349,450 312,200 50,000 : \$ 895,540 : \$ 2,987,764	\$ 2,815,879	\$7,000 \$8,000 \$9,000 25,000 25,000 25,000 5,000 111,500 5,000 111,500 5,000 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Instrument Enginement Instrument Contor - Dewnhole TAP ROCK RESOURCE	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 138,250 349,450 349,450 312,200 50,000 : \$ 895,540 : \$ 2,987,784	\$ - \$ 2,815,879	\$7,000 \$8,000 \$9,000 25,000 25,000 25,000 5,000 111,500 5,000 111,500 5,000 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Weithead Permanent Packers/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Massurem Electrical/Grounding/Safety Permanent Equipment Instrument Enginement Instrument Contor - Dewnhole TAP ROCK RESOURCE	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS ES COMPANY APPRO	4,890 42,750 138,250 349,450 349,450 312,200 50,000 : \$ 895,540 : \$ 2,987,784	\$ 2,815,879	\$7,000 \$8,000 \$9,000 25,000 25,000 25,000 5,000 111,500 5,000 111,500 5,000 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Trobing Weithead Permanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem Electrical/Grounding/Safeh Permanent Equipment Inst Other - Dewnhole TAP ROCK RESOURCE CEO	ent y Equipment silation TOTAL TANGIBLES TOTAL COSTS ES COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879 RRT RRT AMB	\$7,000 \$8,000 \$9,000 25,000 25,000 25,000 5,000 111,500 5,000 111,500 5,000 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Trobing Weithead Permanent Packors/Hange Tanks Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem Electrical/Grounding/Safeh Permanent Equipment Inst Other - Dewnhole TAP ROCK RESOURCE CEO	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	\$7,000 \$8,000 \$9,000 25,000 25,000 25,000 5,000 111,500 5,000 111,500 5,000 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Tubing Weilhead Permanent Packors/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem Electrica/Grounding/Safety Permanent Equipment Inst Other - Surface Other - Dewithole TAP ROCK RESOURCE CEO VP - Land & Legal NON OPERATING PAR*	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 12,500 6,000 111,500 5 419,000 \$ 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 12,500 11,500 111,500 5 1,314,540 \$ 6,275,463
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packora/Hange Tanks Compressor Surface Flowtines Getthering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrical/Grounding/Safety Permanent Equipment Inst Other - Downhole TAP ROCK RESOURCE CEO CFO VP - Land & Legal	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 12,500 6,000 111,500 5 419,000 \$ 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 6,275,463
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packors/Hange Tanks Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrica/Grounding/Safeh Permanent Equipment Inst Other - Dewnhole TAP ROCK RESOURCE CEO VP - Land & Legal NON OPERATING PAR*	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 12,500 6,000 111,500 5 419,000 \$ 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 12,500 11,500 111,500 5 1,314,540 \$ 6,275,463
Conductor Casing Surface Casing surface Casing and intermediate Casing Production Casing Tubing Weilhead Permanent Packors/Hange Tanka Production Vessels Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Messurem Electrica/Grounding/Safety Permanent Equipment Inst Other - Surface Other - Dewithole TAP ROCK RESOURCE CEO VP - Land & Legal NON OPERATING PAR*	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 12,500 6,000 111,500 5 419,000 \$ 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 12,500 11,500 111,500 5 1,314,540 \$ 6,275,463
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packors/Hange Tanks Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measurem Electrica/Grounding/Safeh Permanent Equipment Inst Other - Dewnhole TAP ROCK RESOURCE CEO VP - Land & Legal NON OPERATING PAR*	ent y Equipment allation TOTAL TANGIBLES TOTAL COSTS S COMPANY APPRO	4,890 42,750 136,250 349,450 312,200 50,000 50,000 : \$ 895,540 : \$ 2,987,764 VAL: VP - Expiorate VP - Operation	\$ 2,815,879	37,000 88,000 69,000 25,000 25,000 12,500 6,000 111,500 5 419,000 \$ 471,800	4,590 42,750 138,250 5349,450 312,200 67,000 88,000 89,000 25,000 25,000 12,500 11,500 111,500 5 1,314,540 \$ 6,275,463



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #228H

SHL: Sec 14, T24S, R31E - 275' FSL, 830' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 330' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,350 feet subsurface to evaluate the Wolfcamp B Formation. The proposed well will have a measured depth (MD) of approximately 17,350 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hiason

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

Tap Rock Operating

602 Park Point Drive • SUITE 200 • Golden, CO 80401

Phone (720) 772-5090

		OF COSTS AND AUTH	TORIZATION FOR EXPER	IDITURE	
	October 27, 2017			AFE NO.:	XXX
WELL NAME:	ouble Diamond Fed	24S31E1414 #228		FIELD:	Purple Sage
LOCATION:	avems			MD/TVD:	17350'/12350'
STATE N	lew Mexico			LATERAL LENGTH:	4,500
COUNTY	ddy			GEOLOGIC TARGET	
_				GEOLOGIC TARGET	Wolfcamp B
REMARKS: D	rill and complete a t	norizontal lower Wolfo	camp with 21 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, Surf	eco, Survey)	41,900	3,000		44,900
Location/Pit Construction		108,000	•	8,000	116,000
Orilling (Contractor & Mob)		510,000			510,000
Cementing Services/Equipme Bits/Drill Out Assemblies	nt	126,000			126,000
Fluid Circulation Equipment/S	andan.	66,500	30,000		96,500
Fluids/Chemicals	MINICAR	47,770			47,770
Fluids/Cuttings/Wastewater D	Isonsel	71.000	30,000		101,000
Fuel/Power	opuoer	105.000			125,000
Water		30,000	105.000		210,000
Directional Drilling, Surveys			221,000		251,000
Mud Logging		151,000			151,000
ogging/Formation Evaluation		13,000			15,000
Rig Supervision/Engineering		84,000	4.500	48.88	4,500
Freight/Transportation		30,000	16,500	10,000	158.400
Lebor		128,500	13,000		66,500
Supplies		120,500	34,400	8,500	150,000
Rental - Surface Equipment		71,400	96,350		34,400
Rentzl - Living Quarters		48.200	18,080		167,750
Rental - Downhole Equipment		49,000	10,000		66,280
TU/Workover Rig/Swab		40,000	80,000		49,000
Perforating/Wireline/Slickline			86,000		000,08
emporary Packers/Plugs			22,000		86,000 22,000
ligh Pressure Pump Truck			41,500	-	41,500
itimutation			1,554,000		1,554,000
Vater Transfer/Flowback Servi	ces/Disposal		145,000		145,000
ermanent Equipment Installat	don		140,000		143,000
Plugging & Abandonment					
Verhead		11,000	16,000	1,500	28,500
nsurance		31,690		1,000	31,680
contingency		185,095	235,149	4,800	425,044
T	OTAL INTANGIBLES		\$ 2,815,879	\$ 52,800	\$ 4,804,724
ANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	
onductor Casing		4,890	COMPLETION	PRODUCTION	TOTAL COSTS
urface Casing		42,750			4,890 42,750
st Intermediate Casing		138,250			136,250
nd Intermediate Casing		335,950			335,950
roduction Casing		305,000			305,000
pnidu					- 303,000
Velihead		50,000		37,000	87,000
'ermanent Packers/Hanger/Ptu	10.6				000,000
	igs.		•	-	•
ermanent Packers/Hanger/Ptu enks roduction Vessels	igs.		<u>:</u>	88,000	88,000
anks roduction Vessels	igs			-	88,000 89,000
enks	ygs		·	000,88	88,000 89,000
enks roduction Vessels compressor	ıga		·	88,000	88,000 89,000
enks roduction Vessels compressor urface Flowlines athering Lines	iga			88,005 69,000 25,000	58,000 89,000 25,000
enks roduction Vesseis empressor urfsce Flowlines athering Lines sives/Controllers	ga		•	88,000 89,000 25,000 25,000	88,000 89,000 25,000 25,000
enks roduction Vesseis compressor urface Flowlines athering Lines sives/Controllers rifficial LIR Equipment strumentation/Measurement	ogs.			88,000 89,000 25,000 25,000	88,000 89,000 25,000 25,000
enks roduction Vessels compressor urface Flowlines athering Lines alves/Controllers rifficial LIR Equipment strumentation/Measurement	ulpment			88,000 69,000 25,000 25,000 25,000 12,500	88,000 89,000 25,000 25,000
inks orduction Vessels ompressor urface Flowlines athering Lines athering Lines dives/Controllers difficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safaty Equ pressent Equipment Installati	ulpmeat		•	88,000 69,000 25,000 25,000 25,000 12,500 6,000	88,000 89,000 25,000 25,000 25,000 12,500 6,003
enks roduction Vessels compressor urfsce Flowlines athering Lines alves/Controllers rifficial LIR Equipment strumentation/Measurement lectrical/Grounding/Safety Equ ermanent Equipment Installati ther - Surface	ulpmeat		•	88,000 69,000 25,000 25,000 25,000 12,500	88,000 89,000 25,000 25,000 12,500
enks roduction Vessels compressor urfsce Flowlines athering Lines sives/Controllers rifficial LIR Equipment strumentation/Measurement ectrical/Grounding/Safety Equ ermanent Equipment Installati ther - Surface	ulpment Ion			88,000 69,000 25,000 25,000 25,000 12,500 6,000	88,000 89,000 25,000 25,000 25,000 12,500 6,003
inks roduction Vessels compressor untace Flowlines sthering Lines deves/Controllers difficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equ rmanent Equipment Installati ther - Surface	ulpmeat		\$.	88,000 69,000 25,000 25,000 25,000 12,500 6,000	88,000 89,000 25,000 25,000 25,000 12,500 6,003
enks roduction Vessels compressor urfsce Flowlines athering Lines sives/Controllers rifficial LIR Equipment strumentation/Measurement ectrical/Grounding/Safety Equ ermanent Equipment Installati ther - Surface	ulpment Ion	\$ 874,840	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 12,500 6,000 111,500	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500
inks roduction Vessels compressor untace Flowlines athering Lines elves/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equ rmanent Equipment Installent ther - Surface ther - Downhole	ulpment Ion TOTAL TANGIBLES : TOTAL COSTS :	\$ 874,840 \$ 2,910,885		88,000 69,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000	88,000 89,000 25,000 25,000 25,000 12,500 6,003 111,500
inks roduction Vessels compressor untace Flowlines athering Lines elves/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equ rmanent Equipment Installent ther - Surface ther - Downhole	ulpment Ion TOTAL TANGIBLES : TOTAL COSTS :	\$ 874,840 \$ 2,910,885	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,003 111,500 5 1,293,840 \$ 6,198,564
inks orduction Vessels ompressor urface Flowlines athering Lines wheel/Controllers rifficial Lift Equipment strumentation/Measurement extrical/Brounding/Safety Equipment Equipment installati ther - Surface ther - Downhole	ulpment Ion TOTAL TANGIBLES : TOTAL COSTS :	\$ 874,840 \$ 2,910,885	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000	88,000 89,000 25,000 25,000 25,000 12,500 6,003 111,500 5 1,293,840 \$ 6,198,564
enks roduction Vesseis congressor urface Flowlines ethering Lines ether - Surface ther - Downhole AP ROCK RESOURCES C	ulpment ion TOTAL TANGIBLES : TOTAL COSTS : OMPANY APPROV	\$ 874,840 \$ 2,910,885	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
inks roduction Vessels compressor untace Flowlines sthering Lines elves/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equipment ither - Surface ther - Downhole AP ROCK RESOURCES C	ulpment ion TOTAL TANGIBLES : TOTAL COSTS : OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL:	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
enks coduction Vessels compressor urface Flowlines sthering Lines wheel/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Brounding/Safety Equipment Equipment installati ther - Surface ther - Downhole AP ROCK RESOURCES C	TOTAL TANGIBLES : TOTAL COSTS : OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL: VP - Exploration	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
enks roduction Vessels compressor urface Flowlines ethering Lines elves/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equ romanent Equipment Installet ther - Surface ther - Downhole AP ROCK RESOURCES C	TOTAL TANGIBLES : TOTAL COSTS : OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL:	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
anks roduction Vessels compressor urface Flowlines sthering Lines alves/Controllers rifficial Lift Equipment strumentation/Measurement lectrical/Grounding/Safety Equ ermanent Equipment Installent ther - Surface ther - Downhole AP ROCK RESOURCES C CEO CFO VP - Land & Legal	TOTAL TANGIBLES: TOTAL COSTS: OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL: VP - Exploration	\$ 2,815,879	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 - \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
anks reduction Vessels compressor urfsce Flowlines sthering Lines shves/Controllers rifficial Lift Equipment strumentation/Measurement technical/Grounding/Safety Equ remanent Equipment Installati ther - Surface ther - Downhole AP ROCK RESOURCES C CEO CFO VP - Land & Legal ON OPERATING PARTNEI	TOTAL TANGIBLES: TOTAL COSTS: OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL: VP - Exploration	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,564
inks roduction Vessels congressor untace Flowlines sthering Lines elves/Controllers rifficial Lift Equipment strumentation/Measurement ectrical/Grounding/Safety Equipment inter - Surface ther - Downhole AP ROCK RESOURCES C CEO CFO VP - Land & Legal	TOTAL TANGIBLES: TOTAL COSTS: OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL: VP - Exploration	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,864
inks oduction Vessels impressor inface Flowlines thering Lines westControllers tifficial Lift Equipment strumentation/Measurement strumentation/Measurement strumentation/Measurement inter-surface her - Surface her - Downhole AP ROCK RESOURCES C CEO CFO VP - Land & Legal ON OPERATING PARTNEI Company Name: Demonstrument Company Name: C	TOTAL TANGIBLES: TOTAL COSTS: OMPANY APPROV	S 874,840 S 2,910,885 AL: VP - Exploration VP - Operation P - Business Developmen	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,564
inks oduction Vessels impressor inface Flowlines sthering Lines sthering Lines sthering Lines strumentation/Measurement strumentation/Measurement strumentation/Measurement strumentation/Measurement inface struction/flowlines/Safety Equ immanent Equipment Installati her - Surface her - Downhole LP ROCK RESOURCES C CEO CFO VP - Land & Legal DN OPERATING PARTNEI	TOTAL TANGIBLES: TOTAL COSTS: OMPANY APPROV	\$ 874,840 \$ 2,910,885 AL: VP - Exploration	\$ 2,815,879	88,000 69,000 25,000 25,000 25,000 11,500 6,000 111,500 \$ 419,000 \$ 471,800	88,000 89,000 25,000 25,000 25,000 12,500 6,000 111,500 \$ 1,293,840 \$ 6,198,564



9/12/2017

Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

E: Well Proposal –Double Diamond 24S31E1411 #201H

SHL: Sec 14, T24S, R31E - 305' FSL, 630' FWL BHL: Sec 11, T24S, R31E - 200' FNL, 330' FWK

VIA Certified Mail # 7017 0530 0000 4608 1471



Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 11825 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 22000 feet.

Regarding the above, enclosed for your further handling is our AFE dated 9/7/2017 for the captioned proposed well. In the event Douglas Cameron McLeod elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible.

TRO is proposing to drill this well under the terms of the executed Joint Operating Agreement dated June 1, 2017 covering the S/2 of Section 11, Township 24 South, Range 31 East, Eddy County, New Mexico.

Should you have any questions regarding the above, please contact the undersigned.

Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures



$$\rm I/We\ elect\ to\ participate\ in\ the\ drilling\ and\ completing\ of\ the\ Double\ Diamond\ 24S31E1411\ \#201H}$
${24S31E1411}\text{#201H}$
Commonwe
Company:
By:
Printed Name:
Title:
Date:

	ESTIMATE (OF COSTS AND AUTH	ORIZATION FOR EXPEN	IDITURE	
DATE:	September 7, 2017	or occionate point		AFE NO.:	XXX
	Double Diamond 24S3	N1F1411 #201H		FIELD:	Purple Sage
	Caverns	7121411 #20111		MD/TVD:	22000'/11825'
	New Mexico			LATERAL LENGTH:	9.750
	Eddy			GEOLOGIC TARGET	Wolfcamp A "X/Y"
COUNTY	Eddy			GEOLOGIC TARGET	Woncamp A A/1
REMARKS:	Drill and complete a ho	orizontal Wolfcamp v	vith 46 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, Su	rface, Survey)	41,900	3,000		44,900
Location/Pit Construction		108,000	10,000	8,000	126,000
Drilling (Contractor & Mob)		570,000			570,000
Cementing Services/Equipm Bits/Drill Out Assemblies	nent	151,000 87,500	60,000		151,000 147,500
Fluid Circulation Equipment	//Services	52,670	00,000		52,670
Fluids/Chemicals		81,000	60,000	5,000	146,000
Fluids/Cuttings/Wastewater	Disposal	172,500		-	172,500
Fuel/Power		120,000	230,000	•	350,000
Water		14,000	643,500		657,500
Directional Drilling, Surveys		265,000			265,000
Mud Logging		25,500	4.600		25,500
Logging/Formation Evaluation Rig Supervision/Engineering		91,000	4,500 130,400	34,000	4,500 255,400
Freight/Transportation	8	30,000	31,500	15,000	76,500
Labor		148,500	25,500	8,500	182.500
Supplies		170,000	80,900	0,500	80,900
Rental - Surface Equipment		81,600	162,850		244,450
Rental - Living Quarters		51,200	49,380		100,580
Rental - Downhole Equipme	nt	35,000		-	35,000
CTU/Workover Rig/Swab	0.000		420,000	-	420,000
Perforating/Wireline/Slicklin	e		206,500		206,500
Temporary Packers/Plugs			54,000		54,000
High Pressure Pump Truck			88,000	•	88,000
Stimulation			3,404,000		3,404,000
Water Transfer/Flowback Se	rvices/Disposal		387,500		387,500
Permanent Equipment Insta	llation				•
Plugging & Abandonment					•
Overhead		12,500	26,000	1,500	40,000
Insurance		39,600			39,600
Contingency		217,847	608,753	7,200	833,800
	TOTAL INTANGIBLES		\$ 6,686,283	\$ 79,200	\$ 9,161,800
TANGIBLE COSTS					
		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing		4,890	COMPLETION	PRODUCTION	4,890
Conductor Casing Surface Casing		4,890 42,750	COMPLETION	PRODUCTION	4,890 42,750
Conductor Casing Surface Casing 1st Intermediate Casing		4,890 42,750 136,250	COMPLETION	PRODUCTION	4,890 42,750 136,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing		4,890 42,750 136,250 314,900	COMPLETION	PRODUCTION	4,890 42,750 136,250 314,900
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing		4,890 42,750 136,250	COMPLETION	PRODUCTION	4,890 42,750 136,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing		4,890 42,750 136,250 314,900 366,000	COMPLETION		4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead	Divas	4,890 42,750 136,250 314,900		PRODUCTION	4,890 42,750 136,250 314,900
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/	Plugs	4,890 42,750 136,250 314,900 366,000	COMPLETION	37,000	4,890 42,750 138,250 314,900 368,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks	Plugs	4,890 42,750 136,250 314,900 366,000		37,000	4,890 42,750 136,250 314,900 366,000 - 92,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels	Plugs	4,890 42,750 136,250 314,900 366,000		37,000	4,890 42,750 138,250 314,900 368,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor	Plugs	4,890 42,750 136,250 314,900 366,000		37,000 110,000 89,000	4,890 42,750 136,250 314,900 366,000 92,000 110,000 89,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines	Plugs	4,890 42,750 136,250 314,900 366,000		37,000	4,890 42,750 136,250 314,900 366,000 - 92,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead	Plugs	4,890 42,750 136,250 314,900 366,000		37,000 110,000 89,000	4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines	Plugs	4,890 42,750 136,250 314,900 366,000		37,000 - 110,000 89,000 - 25,000 25,000	4,890 42,750 136,250 314,960 366,000 - 92,000 - 110,000 89,000 - 25,000 25,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment		4,890 42,750 136,250 314,900 366,000		37,000 - 110,000 89,000 - 25,000 25,000	4,890 42,750 136,250 314,960 366,000 - 92,000 - 110,000 89,000 - 25,000 25,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Trubing Weithead Permanent Packers/Hanger/I Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety	nt Equipment	4,890 42,750 136,250 314,900 366,000		37,000 110,000 89,000 25,000 25,000	4,890 42,750 136,250 314,900 366,000 92,000 110,000 89,000 25,000 10,000 12,500
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Trubing Weithead Permanent Packers/Hanger/I Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety	nt Equipment	4,890 42,750 136,250 314,900 366,000		37,000 	4,890 42,750 136,250 314,900 366,000 92,000 110,000 89,000 25,000 10,000 12,500
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface	nt Equipment	4,890 42,750 136,250 314,900 366,000		37,000 110,000 89,000 25,000 25,000 10,000 12,500 6,000	4,890 42,750 138,250 314,900 368,000
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weithead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Forunding/Safety Permanent Equipment Instal	nt Equipment lation	4,890 42,750 136,250 314,900 366,000		37,000 110,000 89,000 25,000 25,000 10,000 12,500 6,000	4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing Surface Casing 1at Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controlliers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface	nt Equipment	4,890 42,750 136,250 314,900 366,000		37,000 	4,890 42,750 136,250 314,900 366,000 92,000 110,000 89,000 25,000 10,000 11,500
Conductor Casing Surface Casing Surface Casing 1at Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controlliers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface	nt Equipment lation	4,890 42,750 136,250 314,900 366,000 55,000		37,000 110,000 89,000 25,000 10,000 12,500 6,000 111,500	4,890 42,750 136,250 314,900 366,000 110,000 89,000 25,000 10,000 11,500
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface Other - Downhole	nt Equipment liation TOTAL TANGIBLES TOTAL COSTS	4,890 42,750 136,250 314,900 366,000 55,000 55,000	· · · · · · · · · · · · · · · · · · ·	37,000 110,000 89,000 25,000 22,000 10,000 12,500 6,000 111,500 5 426,000	4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Trubing Weithead Permanent Packers/Hanger/ Tanks Compressor Surface Flowlines Gethering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface Other - Downhole	nt Equipment lation TOTAL TANGIBLES TOTAL COSTS G COMPANY APPROV	4,890 42,750 136,250 314,900 356,000 55,000 55,000 : \$ 919,790 : \$ 3,316,107	\$ \$ 6,686,283	37,000 110,000 89,000 25,000 10,000 12,500 6,000 111,500 5 426,000 \$ 505,200	4,890 42,750 136,250 314,900 366,000 92,000 110,000 25,000 10,000 111,500 6,000 111,500 \$ 1,345,790 \$ 10,507,590
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/ Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Surface Other - Downhole	nt Equipment Ilation TOTAL TANGIBLES TOTAL COSTS COMPANY APPROV	4,890 42,750 136,250 314,900 366,000 55,000 55,000	\$ - \$ 6,686,283	37,000 110,000 89,000 25,000 22,000 10,000 12,500 6,000 111,500 5 426,000	4,890 42,750 136,250 314,900 368,000
Conductor Casing Surface Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger/ Tanks Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Founding/Safety Permanent Equipment Instal Other - Surface Other - Downhole	nt Equipment lation TOTAL TANGIBLES TOTAL COSTS G COMPANY APPROV	4,890 42,750 136,250 314,900 366,000 55,000 55,000 : \$ 919,790 : \$ 3,316,107	\$ - \$ 6,686,283	37,000 110,000 89,000 25,000 10,000 12,500 6,000 111,500 5 426,000 \$ 505,200	4,890 42,750 136,250 314,900 366,000 92,000 110,000 25,000 10,000 111,500 6,000 111,500 \$ 1,345,790 \$ 10,507,590
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9/12/2017

Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal – Double Diamond 24S31E1411 #208H

SHL: Sec 14, T24S, R31E - 305' FSL, 830' FEL BHL: Sec 11, T24S, R31E - 200' FNL, 330' FEL



VIA Certified Mail # 7017 0530 0000 4608 1495

Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface location (SL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 11825 feet subsurface to evaluate the Wolfcamp Formation. The proposed well will have a measured depth (MD) of approximately 22000 feet.

Regarding the above, enclosed for your further handling is our AFE dated 9/7/2017 for the captioned proposed well. In the event Douglas Cameron McLeod elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible.

TRO is proposing to drill this well under the terms of the executed Joint Operating Agreement dated June 1, 2017 covering the S/2 of Section 11, Township 24 South, Range 31 East, Eddy County, New Mexico.

Should you have any questions regarding the above, please contact the undersigned.

Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson

Land Analyst Office: 720-460-3316 ehixson@taprk.com

Enclosures



$\frac{\text{I/We elect to participate in the drilling and completing of the Double Diamond}}{24S31E1411~\#208H}$
$\frac{\text{I/We elect not to participate in the drilling and completing of the Double Diamond}}{24S31E1411~\#208H}$
Company:
By:
Printed Name:
Title:
Date:

		OF COSTS AND AUTH	ONIZATION FOR EXPEN	DITORE	
	September 7, 2017			AFE NO.:	XXX
WELL NAME:	Double Diamond 24S3	1E1411 #208H		FIELO:	Purple Sage
LOCATION:	Caverns			MD/TVD:	22000'/11825'
STATE	New Mexico			LATERAL LENGTH:	9,750
COUNTY	Eddy			GEOLOGIC TARGET	Wolfcamp A "X/Y"
REMARKS:	Drill and complete a ho	orizontal Wolfcamp w	rith 46 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, Su	rface, Survey)	41,900	3,000		44,900
Location/Pit Construction	•	108,000	10,000	8,000	126,000
Drilling (Contractor & Mob)		570,000			570,000
Cementing Services/Equipm Bits/Drill Out Assemblies	nent	151,000 87,500	60,000	-	151,000 147,500
Fluid Circulation Equipment	/Services	52,670	60,030		52,670
Fluids/Chemicals		81,000	60,000	5,000	146,000
Fluids/Cuttings/Wastewater	Disposal	172,500	-	***************************************	172,500
Fuel/Power Water		120,000	230,000		350,000 657,500
Directional Drilling, Surveys		14,000 265,000	643,500		265,000
Mud Logging		25,500			25,500
Logging/Formation Evaluation			4,500	•	4,500
Rig Supervision/Engineering	1	91,000	130,400	34,000	255,400
Freight/Transportation Labor		30,000 148,500	31.500 25.500	15,000	76,500 182,500
Supplies		140,500	80,900	8,300	80,900
Rental - Surface Equipment		81,600	162,850		244,450
Rental - Living Quarters		51,200	49,380		100,580
Rental - Downhole Equipme	nt	35,000			35,000
CTU/Workover Rig/Swab Perforating/Wireline/Slicklin		-	420,000 206,500	-	420,000 206,500
Temporary Packers/Plugs	o .		54,000	-	54,000
High Pressure Pump Truck			68,000	•	88,000
Stimulation			3,404,000	***************************************	3,404,000
Water Transfer/Flowback Se	N. A. P. A. P. C.		387,500		387,500
Permanent Equipment Instal Plugging & Abandonment	llation		***************************************	***************************************	
Overhead		12,500	26,000	1,500	40,000
Insurance		39,600		***************************************	39,600
Contingency		217,847	608,753	7,200	833,800
	TOTAL INTANGIBLES :	\$ 2,396,317	\$ 6,686,283	* 70 700	\$ 9,161,800
	TOTAL INTANOIDELO			\$ 79,200	
TANGIBLE COSTS	TOTAL WITHOUSELD	DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing	TOTAL WYAROSELES	DRILLING 4,890			TOTAL COSTS 4,890
	TOTAL INTANDECES	DRILLING			TOTAL COSTS
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing	TO AL INTERCED S	4,890 42,750 136,250 314,900			TOTAL COSTS 4,890 42,750 136,250 314,900
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing	TO AL INVANOBLES	DRILLING 4,890 42,750 136,250			TOTAL COSTS 4,890 42,750 136,250
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing	TOTAL INTERIOR	DRILLING 4.890 42,750 136,250 314,900 366,000		PRODUCTION	TOTAL COSTS 4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead		4,890 42,750 136,250 314,900			TOTAL COSTS 4,890 42,750 136,250 314,900
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	PRODUCTION	TOTAL COSTS 4,890 42,750 136,250 314,900 366,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	PRODUCTION	TOTAL COSTS 4.890 42.750 136.250 314.900 366.000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger// Tanks Compressor		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	37,000 	TOTAL COSTS 4.890 42.750 136.250 314.800 366.000 92.000 110.000 89.000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger// Tanks Production Vessels Compressor Surface Flowlines		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	37,000 	TOTAL COSTS 4.890 42.750 136,250 314,900 366,000 92,000 110,000 89,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger/I Tanks Production Vessels Compressor Surface Flowlines Gathering Lines		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	37.000 	TOTAL COSTS 4.890 42.750 136,250 314,950 366,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger// Tanks Production Vessels Compressor Surface Flowlines		DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	37,000 	TOTAL COSTS 4.890 42.750 136,250 314,900 366,000 92,000 110,000 89,000
Conductor Casing Surface Casing 1st Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Wellhead Permanent Packers/Hanger/I Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme	Plugs	DRILLING 4.890 42,750 136,250 314,900 366,000	COMPLETION	7.000 	TOTAL COSTS 4.890 42.750 136,250 314,950 366,000
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Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger// Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Downhole TAP ROCK RESOURCES	nt Equipment lation TOTAL TANGIBLES: TOTAL COSTS: G COMPANY APPROV	\$ 919,790 \$ 3,316,107	\$ - \$ 5,686,283	25,000 25,000 110,000 25,000 25,000 10,000 111,500 5,000 111,500 5,000 111,500	TOTAL COSTS 4,890 42,750 136,250 314,800 366,000 110,000 89,000 25,000 25,000 10,000 112,500 6,000 111,500 \$ 1,345,790 \$ 10,507,590
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Conductor Casing Surface Casing Surface Casing Ist Intermediate Casing 2nd Intermediate Casing Production Casing Tubing Weilhead Permanent Packers/Hanger// Tanks Production Vessels Compressor Surface Flowlines Gathering Lines Valves/Controllers Artificial Lift Equipment Instrumentation/Measureme Electrical/Grounding/Safety Permanent Equipment Instal Other - Downhole TAP ROCK RESOURCES	nt Equipment lation TOTAL TANGIBLES: TOTAL COSTS: COMPANY APPROV	\$ 919,790 \$ 3,316,107	\$ 5,686,283	25,000 25,000 110,000 25,000 25,000 10,000 111,500 5,000 111,500 5,000 111,500	TOTAL COSTS 4,890 42,750 136,250 314,800 366,000 110,000 89,000 25,000 25,000 10,000 112,500 6,000 111,500 \$ 1,345,790 \$ 10,507,590
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Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal – Double Diamond 24S31E1414 #228H

SHL: Sec 14, T24S, R31E - 275' FSL, 830' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 330' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,350 feet subsurface to evaluate the Wolfcamp B Formation. The proposed well will have a measured depth (MD) of approximately 17,350 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely, TAP ROCK OPERATING, LLC

Erica Hixson

Erica Hixson Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #228H
I/We elect not to participate in the drilling and completing of the Double Diamond 24S31E1414 #228H
I/We wish to sell our interest at the terms listed herein
Company:
Printed Name: DOUBLAS CAMERON MCLEOX
Title: DWNER
Date: 1//14/2017

Tap Rock Operating

602 Park Point Drive • SUITE 200 • Golden, CO 80401

Other - Surface Other - Downhole Phone (720) 772-5090

1,293,840

6,198,564

419,000

471,800

	ESTIMATE OF COSTS AND AUTHORIZATION FOR I		
	October 27, 2017	AFE NO.:	
•	Davids Diagrand Ford 2452454444 #229	FIEL D.	Du

DATE:	October 27, 2017			AFE NO.:	XXX
WELL NAME:	Double Diamond Fed 2	4S31E1414 #228		FIELD:	Purple Sage
LOCATION:	Cavems			MD/TVD:	17350'/12350'
STATE	New Mexico			LATERAL LENGTH:	4,500
COUNTY	Eddy	-		GEOLOGIC TARGET	Wolfcamp B
COUNTY	Lody			GEOLOGIC IAKGEI	Troncamp B
REMARKS:	Drill and complete a ho	rizontal lower Wolfca	imp with 21 stages	\$	
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, S	urface, Survey)	41,900	3,00	0 -	44,900
Location/Pit Construction		108,000	-	8,000	116,000
Drilling (Contractor & Mob)	510,000			510,000
Cementing Services/Equip	ment	126,000		_	126,000
Bits/Drill Out Assemblles		56,500	30,00	0	98,500
Fluid Circulation Equipmen	nt/Services	47,770			47,770
Fluids/Chemicals		71,000	30,00	0	101,000
Fluids/Cuttings/Wastewate	er Disposal	125,000	-		125,000
Fuel/Power	•	105,000	105,00	0	210,000
Water		30,000	221.00		251,000
Directional Drilling, Survey	78	151,000		***************************************	151,000
Mud Logging	-	15,000			15,000
Logging/Formation Evalua	tion	75,500	4.50	<u> </u>	4,500
Rig Supervision/Engineering		84,000	64.40		158.400
Freight/Transportation	9	30,000	16,50		66,500
Labor		128.500	13.00		150,000
Supplies		120,000	34,40		34,400
Rental - Surface Equipmen		71,400	96,35		167,750
Rental - Living Quarters	it.	48,200	18,08		66,280
Rental - Downhole Equipm	ent	49,000	10,00		49,000
CTU/Workover Rig/Swab	ent	49,000	80.00		60,000
Perforating/Wireline/Slickli	ina		86.00		86,000
Temporary Packers/Plugs	mie .		22.00		22,000
High Pressure Pump Truck			41,50		41,500
Stimulation	•		1,554,00		1,554,000
Water Transfer/Flowback S	Sendres/Disposal	-	145,00		145,000
Permanent Equipment Inst			143,000		
Plugging & Abandonment	Latiation				-
Overhead		11,000	16.00	0 1,500	28,500
Insurance		31,680	10,00		31,680
		185,095	235,14	9 4,800	425.044
Contingency			\$ 2,815,87		\$ 4,904,724
	TOTAL INTANGIBLES :				TOTAL COSTS
TANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	4,890
Conductor Casing		4,890			42.750
Surface Casing		42,750			136,250
1st Intermediate Casing		136,250			335,950
2nd Intermediate Casing		335,950		_	305,000
Production Casing		305,000			305,000
Tubing			-	*****	87,000
Welthead		50,000		37,000	87,000
Permanent Packers/Hange	er/Plugs			-	86,000
Tanks				88,000	89 000
Production Vessels				89,000	89.000
Compressor					25,000
Surface Flowlines				25,000	
Gathering Lines				25,000	25,000
Valves/Controllers				25,000	25,000
Artificial Lift Equipment					
Instrumentation/Measuren	nent			12,500	12,500
Electrical/Grounding/Safe	ty Equipment			6,000	6,000
Permanent Equipment Ins	taliation			111,500	111,500

TAP ROCK RESOURCES COMPANY APPROVAL: VP - Exploration RRT VP - Operations AMB Senior Geologist CEO CFO VP - Operations AMB VP - Land & Legal VP - Business Development SG

2,910,885

2,815,879

NON OPERATING PARTNER APPROVAL:	
Danpagy Name: Do W 1/26 (M Classighed by:	Title: DWNER
Working Interest (%): 50/p Date: 11/14/2	0/7 Tax ID: 349547934
Approval: Yes No (mark one)	
Approval. Trus	

TOTAL TANGIBLES: \$ 874,840

TOTAL COSTS: \$



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #234H

SHL: Sec 14, T24S, R31E - 275' FSL, 940' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 990' FEL





Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,850 feet subsurface to evaluate the Wolfcamp B Lower Formation. The proposed well will have a measured depth (MD) of approximately 17,850 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson

Erica Hixson

Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #234H
24551121414 #25411
$_{\overline{24S31E1414}}$ I/We elect not to participate in the drilling and completing of the Double Diamond
I/We wish to sell our interest at the terms listed herein
Company: DOYGLAS CAMERON MCLEOD
By: / Macan Melaf
Printed Name: PON GLAS CAMERON MCLEDD
Title: DWNER
Date: 11/14/2017

602 Park Point Drive - SUITE 200 - Golden, CO 80401

ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE

DATE:	October 27, 2017			AFE NO.:	XXX
WELL NAME:	Double Diamond Fed	24S31E1414 #234		FIELD:	Purple Sage
OCATION:	Caverns			MD/TVD:	17850'/12850
TATE	New Mexico			LATERAL LENGTH:	4,500
COUNTY	Eddy			GEOLOGIC TARGET	Wolfcamp B Lowe
, ook i					Andrew Control of the
REMARKS:	Drill and complete a	horizontal lower Wolfc	amp with 21 stages		
NTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
and (Legal, Regulator		41,900	3,000		44,900 116,000
ocation/Pit Construct		108,000		8,000	527,000
rilling (Contractor &		527,000			126,000
ementing Services/E		126,000	30,000		96,500
Sits/Drill Out Assembl		49,320	30,000		49,320
fulds/Chemicals	menuaervices	71,000	30,000		101,000
luids/Cuttings/Waste	water Disposal	125,000			125,000
uel/Power	neter biopeda.	110,000	105,000	*	215,000
Vator		30,000	221,000		251,000
Airectional Drilling, Su	rveys	151,000			151,000
Aud Logging	900	15,000			15,000
.ogging/Formation Ev	aluation		4,500		4,500
Rig Supervision/Engla		91,000	64,400	10,000	165,400
reight/Transportation		30,000	16,500	20,000	66,500
abor		128,500	13,000	8,500	150,000
Supplies		•	34,400	•	34,400
Rental - Surface Equip		86,400	96,350		184,750
Rental - Living Quarte		51,200	18,080		69,280
Rental - Downhole Equ		49,000	****	*	49,000 80,000
CTU/Workover Rig/Sw			60,000	*	86,000
erforating/Wireline/\$			86,000		22,000
emporary Packers/Pi		-	22,000 41,500		41,500
figh Pressure Pump	ruck	-	1,554,000	-	1,554,000
Stimulation	ach Caminas/Dianasal		145.000		145,000
Permanent Equipment	ick Services/Disposal	_	145,000		-
Plugging & Abandons					-
Overhead	iem.	11,000	16,000	1,500	28,500
nsurance		32,220			32,220
Contingency		190,204	235,149	4,800	430,153
,	TOTAL INTANGIBLE	8: \$ 2,092,244	\$ 2,815,879	\$ 52,800	\$ 4,960,923
ANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing		4,890			4,890
Surface Casing		42,750			42,750
Ist intermediate Casir		136,250			136,250
2nd Intermediate Casi	ng	349,450			349,450
Production Casing		312,200		-	312,200
Tubing		75.655		37,000	87,000
Wellhead	ana a sellitura	50,000		37,000	00,10
Permanent Packers/H	anger/Plugs			88,000	88,000
Tanks				89,000	89.000
Production Vessels			-	*	-
Compressor Surface Flowlines		-		25,000	25,000
Gathering Lines				25,000	25,000
Valves/Controllers				25,000	25,000
Jone John Jillion				-	-
Artificial Lift Equipme	nt				12,500
		***************************************		12,500	
Instrumentation/Meas Electrical/Grounding/	urement Safety Equipment			6,000	6,000
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen	urement Safety Equipment				6,000
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface	urement Safety Equipment			6,000	6,000
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface	urement Safety Equipment t Installation			5,000 111,500	6,000 111,500
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface	urement Safety Equipment t Installation TOTAL TANGIBLE		\$.	5,000 111,500 	6,000 111,500 \$ 1,314,540
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface	urement Safety Equipment t Installation		\$ 2,815,879	5,000 111,500	6,000 111,500
nstrumentation/Meas Rectrical/Grounding/ ermanent Equipmen Other - Surface Other - Downhole	urement Safety Equipment t Installation TOTAL TANGIBLE	TS: \$ 2,987,784		5,000 111,500 	6,000 111,500 \$ 1,314,540
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface Other - Downhole	urement Safety Equipment t installation TOTAL TANGIBLE TOTAL COST	TS: \$ 2,987,784 OVAL:	\$ 2,815,879	8,000 111,500 5 419,000 \$ 471,800	\$ 1,314,546 \$ 6,275,46
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface Other - Downhole	urement Safety Equipment t installation TOTAL TANGIBLE TOTAL COST	TS: \$ 2,987,784 OVAL: VP - Explore	\$ 2,615,879	5,000 111,500 	\$ 1,314,54 \$ 6,275,46
instrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface Other - Downhole	urement Safety Equipment t installation TOTAL TANGIBLE TOTAL COST PRCES COMPANY APPR CEO	TS: \$ 2,987,784 OVAL:	\$ 2,615,879	8,000 111,500 5 419,000 \$ 471,800	6,000 111,50 \$ 1,314,54 \$ 6,275,463
Artificial Lift Equipme instrumentation/Meas Electrical/Grounding/Permanent Equipmen Other - Surface Other - Downhole TAP ROCK RESOL VP - Land &	TOTAL TANGIBLE TOTAL COST RCES COMPANY APPR CEO RCL CFO WRS Legal	TS: \$ 2,987,784 OVAL: VP - Explore	\$ 2,815,879	8,000 111,500 5 419,000 \$ 471,800	6,000 111,50 \$ 1,314,54 \$ 6,275,463
nstrumentation/Meas Electrical/Grounding/ Permanent Equipmen Other - Surface Other - Downhole	TOTAL TANGIBLE TOTAL COST RCES COMPANY APPR CEO RCL CFO WRS	TS: \$ 2,987,784 OVAL: VP - Explore VP - Operat	\$ 2,815,879	8,000 111,500 5 419,000 \$ 471,800	6,000 111,50 \$ 1,314,54 \$ 6,275,463

Working Interest (%):

Approval: Yes Mg (mark one)



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal – Double Diamond 24S31E1414 #238H

SHL: Sec 14, T24S, R31E - 275' FSL, 800' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 330' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,850 feet subsurface to evaluate the Wolfcamp B Lower Formation. The proposed well will have a measured depth (MD) of approximately 17,850 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson

Erica Hixson Land Analyst Office: 720-460-3316

ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond 24S31E1414 #238H
I/We elect not to participate in the drilling and completing of the Double Diamond 24S31E1414 #238H
I/We wish to sell our interest at the terms listed herein
By: Mancon Mc Land
Printed Name: POUBLAS CAMERON MCLEOD
Title: DWNER
Date:

		Tap Rock O	perating		
602 Park Point Drive • SUITE 200				ENDITURE	Phone (720) 772-5090
		F COSTS AND AUTHO	RIZATION FOR EXP		XXX
-	ber 27, 2017	100151111 #000		AFE NO.:	
-	le Diamond Fed 2	4S31E1414 #238		FIELD:	Purple Sage 17850'/12850'
LOCATION: Cave				MD/TVD:	
	Mexico			LATERAL LENGTH:	4,500
COUNTY	***************************************			GEOLOGIC TARGET	Wolfcamp B Lower
REMARKS: Drill a	and complete a ho	rizontal lower Wolfca	amp with 21 stages		
INTANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Land (Legal, Regulatory, Surface,	Survey)	41,900	3,000		44,900
Location/Pit Construction		108,000		000,8	116,000 527,000
Drilling (Contractor & Mob)		527,000			125,000
Cementing Services/Equipment		126,000 68,500	30,000		96,500
Bits/Drill Out Assemblies Fluid Circulation Equipment/Serv	Ices	49,320	30,000		49,320
Fluids/Chemicals	1000	71,000	30,000		101,000
Fluids/Cuttings/Wastewater Dispo	psal	125,000	•		125,000
Fuel/Power		110,000	105,000		215,000
Water		30,000	221,000		251,000
Directional Drilling, Surveys		151,000			151,000
Mud Logging		15,000	4,500		4,500
Logging/Formation Evaluation Rig Supervision/Engineering		91,000	64,400		165,400
Freight/Transportation		30,000	16,500		66,500
Labor		128,500	13,000		150,000
Supplies			34,400	-	34,400
Rental - Surface Equipment		88,400	96,350		184,750
Rental - Living Quarters		51,200	18,080		69,280
Rental - Downhole Equipment		49,000	80,000		49,000 80,000
CTU/Workover Rig/Swab			88,000		86,000
Perforating/Wireline/Slickline Temporary Packers/Plugs			22,000		22,000
High Pressure Pump Truck		Manager Land Control of the Control	41,500		41,500
Stimulation			1,554,000	-	1,554,000
Water Transfer/Flowback Service	e/Disposal		145,000		145,000
Permanent Equipment Installatio	n				
Plugging & Abandonment		44.605	15,000	1,500	28,500
Overhead		11,000 32,220	15,000	1,300	32,220
Insurance Contingency		190,204	235,149	4,800	430,153
	TAL INTANGIBLES	\$ 2,092,244	\$ 2,815,879	\$ 52,800	\$ 4,960,923
TANGIBLE COSTS		DRILLING	COMPLETION	PRODUCTION	TOTAL COSTS
Conductor Casing		4,890			4,890
Surface Casing		42,750			42,750 136,250
1st Intermediate Casing		138,250 349,450			349,450
2nd Intermediate Casing		312,200			312,200
Production Casing Tubing		372,200	-	-	-
Wellhead		50,000		37,000	87,000
Permanent Packers/Hanger/Plug	5		-		
Tanks				88,000	88,000 89,000
Production Vessels				89,000	000,98
Compressor		***************************************		25,000	25,000
Surface Flowlines				25,000	25,000
Gathering Lines				25,000	25,000
Valves/Controllers Artificial Lift Equipment				_	
Instrumentation/Measurement		-		12,500	12,500
Electrical/Grounding/Safety Equ	Ipment			6,000	6,000
Permanent Equipment Installation	on			111,500	111,500
Other - Surface					
Other - Downhole	TOTAL TANGIBLES	\$ 895,540	\$.	\$ 419,000	\$ 1,314,540
	TOTAL COSTS		\$ 2,815,870		\$ 6,275,463
TAP ROCK RESOURCES CO					
		VP - Explora	ation	Senior Ge	ologist
CEO	RCL	VP - Explor	RRT		AS
CFO		VP - Operat		_	
NO Lond Street	WRS	/D Business Doubles	AMB		
VP - Land & Legal	CS	VP - Business Develope	5G	_	
L	-			Market Street,	

NON OPERATING PARTNER APPROVAL:	
GEOMPHAN NAME: DOWN AS CAMBURGEN MUTEDS,	Title: DWNER
Working Interest (%): 50/0 Date: Dat	Tax ID: 379547630
Approval: Yes No (mark one)	11-1119



Douglas Cameron McLeod C/O Petrogulf Corporation 600 Grant Street, Suite 850 Denver, CO 80203

RE: Well Proposal - Double Diamond 24S31E1414 #224H

SHL: Sec 14, T24S, R31E - 275' FSL, 910' FEL BHL: Sec 14, T24S, R31E - 200' FNL, 990' FEL

VIA Certified Mail # 7017 0190 0000 4060 5211



Ladies and Gentlemen:

Tap Rock Operating, LLC (TRO), as Operator, hereby proposes to drill the captioned well at the above referenced surface hole location (SHL) to the referenced bottom hole location (BHL). The proposed well will be drilled to an approximate true vertical depth (TVD) of 12,350 feet subsurface to evaluate the Wolfcamp B Formation. The proposed well will have a measured depth (MD) of approximately 17,350 feet.

Regarding the above, enclosed for your further handling is our AFE dated October 27, 2017 for the captioned proposed well. In the event Douglas Cameron McLeod C/O Petrogulf Corporation elects to participate in the proposed well, please execute the enclosed AFE and return to me as soon as possible. Your interest in this well is 5.00%.

TRO is proposing to drill this well under the terms of the AAPL Form 610-1989 Operating Agreement. The Operating Agreement covers the E2 of Section 14, Township 24 South, Range 31 East, Eddy County, New Mexico; a fully executable copy will be sent for your execution should you choose to participate.

If you do not wish to participate in the Operation, TRO would like to offer the following terms:

- 3 year primary term, Term Assignment
- 20% royalty interest
- \$1,500 per net acre bonus consideration

The Term Assignment offer is subject to the approval of TRO's board and verification of title.



Sincerely,

TAP ROCK OPERATING, LLC

Erica Hixson

Erica Hixson

Land Analyst Office: 720-460-3316 ehixson@taprk.com Enclosures

I/We elect to participate in the drilling and completing of the Double Diamond
24S31E1414 #224H
I/We elect not to participate in the drilling and completing of the Double Diamond
24S31E1414 #224H
I/We wish to sell our interest at the terms listed herein
Company: N/A
By: Musen McCol
Printed Name: DOUBLAS CAMERON MCLEON
Title: DWNER
Date: 1/14/2017

Tap Rock Operating Phone (720) 772-5090 602 Park Point Drive • SUITE 200 • Golden, CO 80401 ESTIMATE OF COSTS AND AUTHORIZATION FOR EXPENDITURE XXX AFE NO.: DATE: October 27, 2017 Purple Sage Double Diamond Fed 24S31E1414 #224 FIFI D WELL NAME: 17350712350 MD/TVD Cavems LOCATION LATERAL LENGTH: 4,500 STATE New Mexico Wolfcamp B GEOLOGIC TARGET COUNTY Eddy Drill and complete a horizontal lower Wolfcamp with 21 stages REMARKS: TOTAL COSTS DRILLING COMPLETION PRODUCTION INTANGIBLE COSTS 44,900 41 900 3.000 Land (Legal, Regulatory, Surface, Survey) 8,000 116 000 108,000 Location/Pit Construction 510,000 510,000 Drilling (Contractor & Mob) 126,000 Cementing Services/Equipment 126,000 96,500 30,000 Bits/Drill Out Assemblies 66 500 47 770 Fluid Circulation Equipment/Services 47,770 101.000 30,000 71,000 Fluids/Chemicals 125,000 125 000 Fluids/Cuttings/Wastewater Disposal 210,000 105,000 Fuel/Power 105,000 251,000 30.000 221,000 Water 151 000 151,000 Directional Drilling, Surveys 15,000 15,000 Mud Logging 4.500 4,500 Logging/Formation Evaluation 84,000 10,000 158.400 64,400 Rig Supervision/Engineering 16,500 20,000 68 500 30,000 Freight/Transportation 150,000 128,500 13.000 8,500 Labor 34,400 34 400 Supplies 71,400 96,350 167,750 Rental - Surface Equipment 18,080 66 280 Rental - Living Quarters 49,000 Rental - Downhole Equip 49,000 80,000 80,000 CTU/Workover Rig/Swab 66.000 86 000 Perforating/Wireline/Slickline 22,000 Temporary Packers/Piugs 22 000 41.500 41,500 High Pressure Pump Truck 1,554,000 1 554 000 Stimulation 145,000 145,000 Water Transfer/Flowback Services/Disposal Permanent Equipment Installation Plugging & Abandonment 26,500 1,500 11.000 16,000 Overhead 31,680 31 680 Insurance 4,800 425,044 235,149 185.095 Contingency 4,904,724 52,800 TOTAL INTANGIBLES: \$ 2,036,045 2.815.879 TOTAL COSTS DRILLING COMPLETION PRODUCTION TANGIBLE COSTS 4,890 Conductor Casing 4 890 Surface Casing 42.750 136,250 136,250 1st Intermediate Casing 335,950 2nd Intermediate Casing 335 950 305,000 Production Casing 305 000 **Tubing** 87,000 37,000 50,000 Wellhead Permanent Packers/Hanger/Plugs 88 000 88 000 Tanks 89.000 Production Vessels 89 000 Compressor 25 000 25,000 Surface Flowlines 25 000 25,000 **Gathering Lines** 25.000 25,000 Valves/Controllers Artificial Lift Equipment 12,500 12,500 Instrumentation/Measurement Electrical/Grounding/Safety Equipment 6,000 111,500 111,500 Permanent Equipment Installation Other - Surface Other - Downhole 1,293,840 419,000 TOTAL TANGIBLES : \$ 874,840 6,198,564 TOTAL COSTS : \$ 2,815,879 \$ 471,800 2,910,885 5 TAP ROCK RESOURCES COMPANY APPROVAL: VP - Exploration Senior Geologist RRT RCI VP - Operations VP - Land & Legal ____ VP - Business Development SG

NON OPERATING PARTNER APPROVAL:	/	
Gempany Name: DOUGLAS CA	GARRON MCLEDS	Title: DWNER
Working Interest (%): 50/0	Date:	Tax 10: 379547930
Approval. Yes	No (mark one)	