**LITAN RESOURCES I, INC.** 

August 12, 1997

\$ ....

. .

AUG 1 8 10-77

DHC 9/8/97

State of New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: Mr. William J. LeMay

Re: Exception to Rule 303-A Brunson-Argo Well No. 15 Tubb Oil and Gas Pool and Drinkard Pool Lea County, New Mexico

nuis 181

Gentlemen:

Titan Resources I, Inc. requests administrative approval for an exception to Rule 303-A to downhole commingle production from two pools within the wellbore in the following well:

Operator:	Titan Resources I, Inc.
	500 West Texas, Suite 500
	Midland, Texas 79701
Well:	Brunson-Argo No. 15
Location:	Unit Letter F,
	1880 ft FNL and 1980 ft FWL
	Section 10, T-22-S, R-37-E
	Lea County, New Mexico
Upper Pool:	60240 Tubb Oil and Gas
Lower Pool:	19190 Drinkard

Enclosed are the following in support of this application:

- 1. Plat of the area
- 2. C-102's showing dedicated acreage
- 3. C-116's for each zone
- 4. Production decline curves for each zone
- 5. Well data sheet
- Computation of values of commingled fluids 6.
- 7. Proposed allocation of production

Oil Conservation Division August 12, 1997 Page 2

۰.

The subject well was dually completed in the Tubb and Drinkard zones in 1972 and was produced as a dual completion until the Tubb zone became uneconomical in 1989. After the Tubb zone was shut-in, the well continued to produce from the Drinkard only.

Titan acquired the well in November 1996. In June 1997, remedial work was initiated to clean out, acidize and test both the Tubb and Drinkard independently to determine the productive potential of each zone. Currently, the well is producing as a single completion from the Tubb, pending approval of this downhole commingling request.

The subject well meets all the requirements for downhole commingling as set out in Rule 303-C. The working interest ownership and royalty interest ownership is common for both the Tubb and Drinkard zones.

Approval of this request will result in more efficient producing operations which will extend the productive lives of both zones and will recover hydrocarbons which would otherwise not be recovered.

By copy of this letter, all offset operators have been notified of Titan's request for downhole commingling.

Yours very truly,

Bruce Woodard Production Operations Manager

JMJ/mjl

Attachments

cc: NMOCD - Hobbs Offset Operators Brunson-Argo No. 15 Offset Operators

**1** 1

- Anadarko Petroleum Corp. Box 2497 Midland, TX 79702
- Arch Petroleum, Inc. 10 Desta Drive, Suite 420 E Midland, TX 79705
- 3. BEC Corporation Box 1392 Midland, TX 79702
- Chevron USA Production Company Box 1150 Midland, TX 79702
- Cross Timbers Operating Company Box 52070 Midland, TX 79710-2070
- 6. Exxon Company, USA Box 1600 Midland, TX 79702
- John H. Hendrix Corporation
  P. O. Box 3040
  Midland, TX 79702-3040
- OXY USA, Inc. Box 50250 Midland, TX 79710
- 9. Texaco, Inc. Box 3109 Midland, TX 79702
- 10. Zia Energy, Inc. Box 2219 Hobbs, NM 88241

TRAL DRI Chevron #421	NKAND (Wei N Torson	Phillips (Dual) Small Tre	- 14, *4. N. Lockhart
	(1) (WO) 142 S Res. (WO) 142 S S Res. (WO) 142 S S S S S S S S S S S S S S S S S S S	Phillips lots 13 18,01K5 lots 13 18,01K5 lots 13 18,01K5 Dual 12 31.92,2 Morshall Unit - 4 A Hordison - Morshall Unit - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	
ER)	Collins E.Ware Aller 3 Collins E.Ware Aller	- MorshallUnit 3 4 A Hordison	Marathan Oxy
	100 100 100 100 100 100 100 100 100 100	2 Swen P Ping 2 3 Dual	3 (DO) Duallous 400
152 Dyol	C.Hore PS 325 154 7 4 cm y 1916 1 P/B) 47 0 0 003 cm y 1916 1 P/B) 47	EUNICE	FIED
W.T.MC.Com Blog	(Duol) 402 Augh Corrigon	Archandling Singer Stower EUNICE	bual 8 3 3 3 3 3 4 10 0 10 1
REAL SIN THE PRE	Wiper Dil Shell Collins E. Ware	J.H. Hendrik	10 14 00 15 wb 00 13 60001) Rice Eng: Exxon
Sult APPT (Pib)	(wo) (0/8) (0/8) (1/8)	Bliss Ener. El Paso Noti T0415, 10 (Pro) A" O <sup>2</sup> Euri (Conn) Andre (Pro) Energy (Conn) Andre (Pro) Energy (Conn) (Conn)	8-934 (1 20, 17 19 19 19 19 19 19 19 19 19 19 19 19 19
Tista Sa Arch Pet		Devon (Cities Serv.) 13 • Enerosz 2 • Ener	2/00/0000 Dugi 2 1/03/00 2/00 18 -27 29 30 2/00 18 -27 20 20 2/00 18 -27 2
Zis Eaer. 1 "Baker" Grizzeli UGrace - 220 Pet. Y 1433001 Pet.	Getty Arch Pet. Zia - Getty	Devon Eneroz Scher Dull Prod. Brunson Aneserke Jarunson Aneserke Jarunson Aneserke Jarunson Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke Aneserke	23 2 (Gr. W. Disc. D. S.) 10 373.1 Por Kar Dr. g (Tripli 22 7.5 25
(Pra) Duadi - I (Dua) 3 - I (Zzelpaterizence	(W. M. Kinewall Pred Hushicorrigen W. M. Kinewall Pred Hushicorrigen Wall (Alexaco La Ener.) Cit Serv Madorke (Wall (Mal) (Wall (Mal) (Mal) (Wall (Mal)	A.L. Brunson	work al 142 425 WO FOUGH FISSION F STORES
Yarbarough Of G (P/B)	J.H.Hendrix 4 Trois Titan Res.	(WO), Titon Hes. Chevron Arch pg by two (142) 18 6 20 3 6 5 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	10 (Ohio 1, Dual 16
· · - •	(DD) (Dual) Ellion D32368 (WO) (Dual) Zie Ener, JJt. Hendrix Biss Pet. Bryuisun Arge	3 Biss Ener. Arch Pet arbison gruneon Chevron	Anadarka Anadari
(3	Zie Ener. JH. Hendrix Lie Ener. JH. Hendrix (ent) 3 17 base (9/8) 10 16342 4 12 20 (16) Arge (Duel) - Penrast Penross R L Brunson	(WO), Titan Hes. Chevron Arch per (43) 4 Barros Wal Mi (143) 4 Barros Wal Mi (38 Biss Ener. Arch Pet 1 Archason Argo 15 Chevron Argo 15 Chevron Argo 15 State 13 (P/B) 95 5 4 4 (100 A) Pual Argn R. L. Brunson (100 A)	13 67 60 10 10 00 MA
HR ANTWELL	Hendrik (Schio) Styron our F	Bliss Texaco (P/B) O 3.8' B P22 P/B Winse 1.7' Ob) 18 2.8 OF (NS Ghelly) O'Blies Ener" (WO)	1 J.H. Hendris 1 J. H. Hendris 1 J. (I.H.) Status 1 J. H. Hendris 1 J. Hendri
MR ANTWELL Shell ILO Shell I ILO Shell I BINGO	Stellar, 16	16000	Arter Ind S. Arter Dual
Louro E. Grizzell	Pipris Billse J.L. Greenwood (P/B)	PULL A. B. Baker Anter	Z - 1 0 254 3/4 (000)
Amerodo Z Jerre 2 3-PA 8-934 151573 Collins Course Ellio 11		A State of the sta	Out of the second secon
2 10 1001 ? 81 J. Head(12	Subio Colo NCT L. Dreyfus Gay Fais Christmos Chevron Chevron Chevron Chevron	LJ. Davis, etal (S)	
Linet Glory	FILA Dugi (HB) Prist TiA (HB) Culf-St." OT Culf-St." OT	11401 -12 UHendrix Sonio 118 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	$\mathbf{h}_{\mathbf{x}} = \mathbf{h}_{\mathbf{x}} + $
Gampbell Zid GHedricki Ener Sci Stree Stasser With	Chevron (NIC) 8 A S/R 13 A (15 2 A (15 A 20 A (16)8) (17 A 13 A (15) (17 B) (5 II Disc) Duol (Chevron	Contine Hendrix 18 3	C // // // // // // // // // // // // //
Rebeloifiau (wo)	IN A (GUIFF PA 13 ZICH COLEWERD (P/B) ZICH	Apodor Raj 19 G. L. Scheller (3) (1/4) (Artible a sedor) Conoco e fall 1 C. Koual 2 14 3 an 2 Ellion 6	Tr. 1 will Polaris Prus
Christmas	R. E. Cole-State jCold'll	E W. Wolden I. Boyd TTATA	(PA) (nel JO. Parks (PA) Ruby Boyd,
Bettis, Boyle C Be Guifi Sturall	Tr.8 Tr.6 Wagner E	Ener. Aquo.inc. 4 1 1 1 1 1 nterst. M \$322 + 0 1 1 SWO D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cross CARCON 7 Duol X Timbers F.WI Cross
	A Warden II. O Brown	Anadarko 5	3 F Hendrix Timber Hendrix Cossatet Cross Cossatet Loss

Oistrict I PO Box 1980, Hobbs, NM 88241-1980

District II 811 South First, Artesia, NM 88210

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV 2040 South Pacheco, Santa Fe, NM 87505

#### State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

**OIL CONSERVATION DIVISION** 2040 South Pacheco Santa Fe, NM 87505

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

•	API Number -025-1017	6		₂Pool Code 19190		DRI	NKARD	<sub>3</sub> Pool Nan	ne		
₄Property 0 02000		BRUNSO	N-ARGC	)	sPro	perty N	lame			٥V	Vell Number 15
70GRID 15066		TITAN RE	SOURC	ES I, INC.	зОр	erator N	Name				•Elevation 3404
					"Surfa	ce L	ocation				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from		North/South line	Feet from the		est Line	County
F	10	228	37E		18		NORTH	1980	WE	ST	LEA
							Different From				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from	m the	North/South line	Feet from the	East/W	lest Line	County
12Dedicated A	1	1	Consolidat	ion Code	15Order No.		I				[
40.00											
							ON UNTIL ALL II EEN APPROVED			EN COR	SOLIDATED
198	ø′		5					I hereby certify true and compo- Signature BRUCE Printed Name PROD. CC Title 08-08-97 Date I hereby certify wes plotted fro or under my su correct to the b	that the initiate to the back the to the back th	CERT	IFICATION ontained herein is nowledge and belie ) ) TFICATION shown on this plat surveys made by m same is true and
								Signature and		oressional	Surveyer:

District I PO Box 1980, Hobbs, NM 88241-1980

District II 811 South First, Artesia, NM 88210

ι.

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV 2040 South Pacheco, Santa Fe, NM 87505

# State of New Mexico

Energy, Minerals & Natural Resources Department

Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

### **OIL CONSERVATION DIVISION** 2040 South Pacheco Santa Fe, NM 87505

AMENDED REPORT

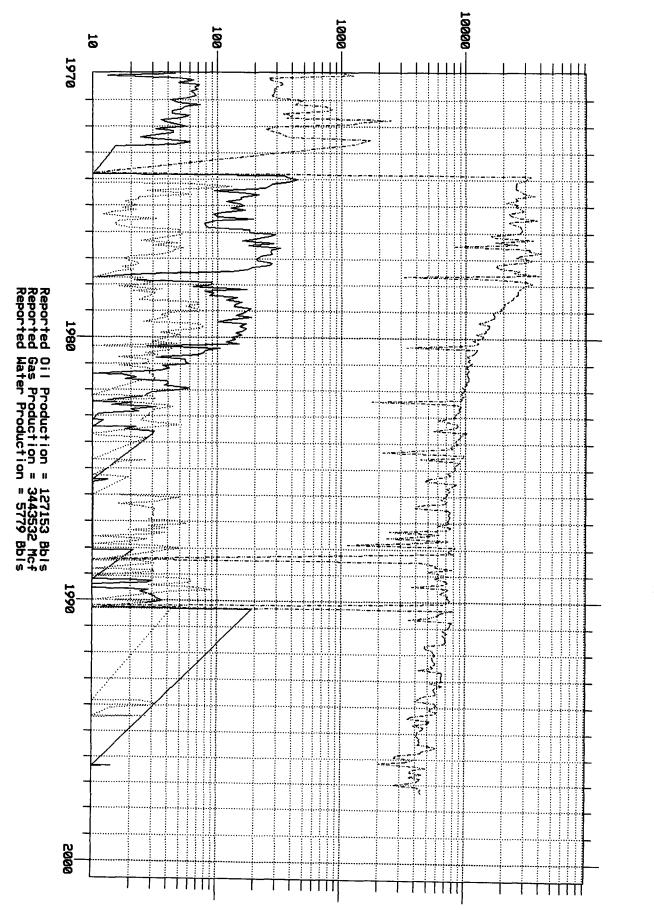
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-1017	6	2Pool Code 6024		TUBE	B OIL AND GAS	3Pool Nam	8		
4Property Code 020000	BRUNSON			perty Na			<u></u>	۰۷	/ell Number 15
70GRID No. 150661		SOURCES I, INC.	•	erator Na	ame				Elevation 3404
			<sub>•</sub> Surfa	ce Lo	cation			l	
UL or lot no. Section	Township	Range Lot Idn	Feet from	m the	North/South line	Feet from the	East/W	est Line	County
F 10	228	37E	18	80	NORTH	1980	WE	ST	LEA
	11	Bottom Hole	Locatio	n lf D	ifferent From	Surface			
UL or lot no. Section	Township	Range Lot Idn	Feet from	m the	North/South line	Feet from the	East/W	lest Line	County
1 1	nt or Infill 14Co	onsolidation Code			l	I			- <u></u>
NO ALLOWABLE V						TEDESTS H			
NO ALLOWABLE V					EN APPROVED				
- 731' - 17 	/880					I hereby certify true and comple Signature BRUCE M Printed Name PROD. O Title 08-08-97 Date	that the initiate to the t	tormation cc post of my king and and and and and and and and and and	IFICATION Intelned herein is nowledge and bellef
			icated	to W	Vells No. 15	I hereby certify was plotted from	that the we in field note pervision, e est of my b y Seal of Pr	ell location s is of actual and that the ellef.	IFICATION howm on this plat surveys made by me same is true and Surveyer:

Submit 2 copies to Appropriate District Office.				Ener	gy, M	State of New Mexico Energy, Minerals and Natural Resources Department	of Ne Natu	State of New Mexico s and Natural Resour	) Irces Dep	artment					Form C-116 Revised 1/1	Form C-116 Revised 1/1/89
DISTRICT I P.O. Box 1980, Hobbs, NM 88240			$\sim$	Ĕ	20	OIL CONSERVATION	Ň	TION		<b>NOISI</b>	—				1167100	
DISTRICTION P.O. Drawer DD, Artesia, NM 88210 DISTRICT III						204 Santa	0 Pac	2040 Pacheco St. Santa Fe, NM 87505	01							
1000 Rio Brazos Rd., Aztec, NM 87410	U					GAS-OIL RATIO TEST	۲ ۲	ATIO T	EST							
Operator						Pool 19190 DRINKARD	KARD						County LEA			
Address 500 W. TEXAS. SUITE 500, MIDLAND, TEXAS 79701	TEXAS	79701					TYPE OF TEST - (X)	'≳¶ ⊗	Scheduled			Completion	Ō	S	Special	
	WELL		LOCATION			DATE OF	ATUS	CHOKE	TBG.	DAILY ALLOW-		PROD. WATER	D. DURING		GAS	GAS - OIL RATIO
LEASE NAME	Z.	c	s		ᆔ	TEST	STA	SIZE	PRESS.		HOURS	BBLS.	OIL.	BBLS.	M.C.F.	CU.FT/BBL
BRUNSON-ARGO 30-025-10176	15	IT	10	228	37E	06/19/97			30		24	o	37.10	<u>ب</u>	145	145,000
		·	······					<u>, , , , , , , , , , , , , , , , , , , </u>								
							······································									
Instructions:											I hereby certify that the above information is true and complete to the best of my knowledge and belief.	ertify that	that the abor boost of phy/	ye inform knowledg	ye information is true knowledge and belief.	<b>true and slief</b> ,
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance	rcent. Op	erator i	at a rat	le not	d to ta	ke advantag	ie of th	lowable for his 25 perc	the pool If ent toleran	<u> </u>	for l	S	K			
in order that well can be assigned increased allowables when authorized by the Division. Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60°	sed allow F measu	red at a	a press	sure ba	zed by	the UNISION. 15.025 psia	and a	temperatu	re of 60° F.		BRUCE WOODARD	OODARD		PROD. OPNS. MGR.	NS. MGR.	
Specific gravity base will be u.ou. Report casing pressure in lieu of tubing pressure for any well producing through casing.	ŋ pressu	re for a	any we	ll prod	ucing t	through casir	ġ				Printed name and title	ne and ti 97	tie	Įφ	915/682-6612	112
(See Rule 301, Rule 1116 & appropriate pool rules.)	ropriate	pool	rules	<u>:</u>							Dale			-		TNO.

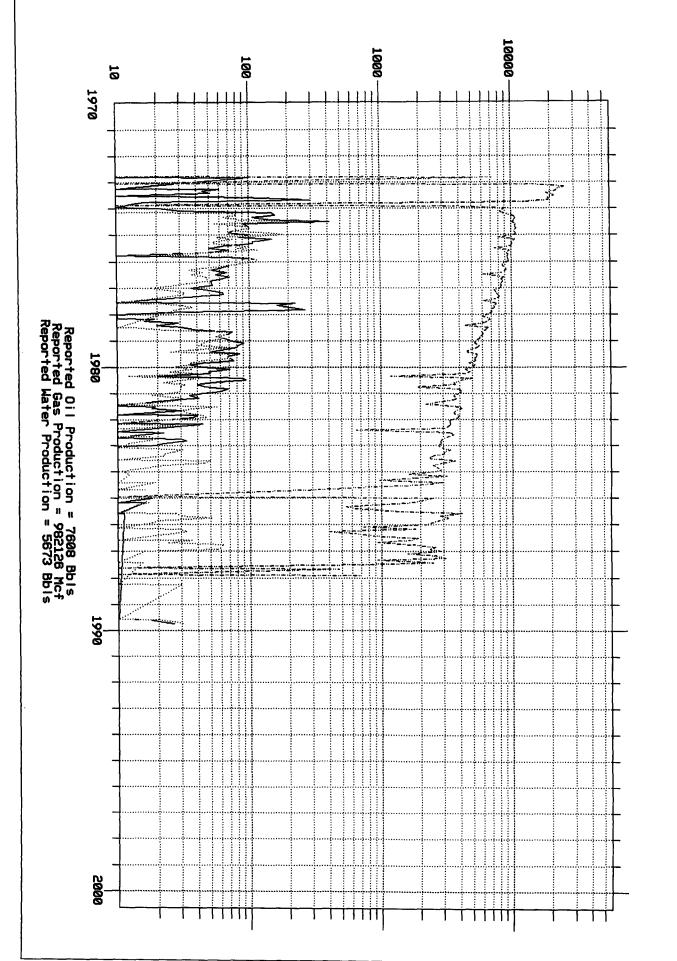
(See Rule 301, Rule 1116 & appropriate pool rules.)	Specific gravity base will be 0.60. Report casing pressure in lieu of tubing pressure for any well producing through casing	Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of	Instructions: During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in During the top that have been 25 percent forerator is encouraged to take advantage of this 25 percent tolerance		BRUNSON-ARGO 15 30-025-10176	LEASE NAME WELL NO.	Address 500 W. TEXAS, SUITE 500, MIDLAND, TEXAS 79701	Operator TITAN RESOURCES I, INC.	1000 Rio Brazos Rd., Aztec, NM 87410	DISTRICT III DISTRICT III	DISTRICT I P.O. Box 1980, Hobbs, NM 88240	Submit 2 copies to Appropriate District Office.
iate p	essure	allowab	produc		 יים 		(AS 79					
ool ru	for any	les whe	ntor at a	ł	  10	+-	701					
les.)	well pr	in authorized	i rate n	ł	 228	S T					₽	ц
	oducinç	base o	of exce		 37E	7					C C	ergy, ł
	y through casi	y the Division f 15.025 psia	eding the top i		07/15/97	DATE OF TEST		Pool 60240 TUBE	GAS-OIL RATIO TES	204 Santa	OIL CONSERVATION	State of New Mexico Energy, Minerals and Natural Resources Department
	ġ	anda	unit all		<u>ד</u>	STATUS	TEST - (X)		L R	u Pac 1 Fe, t	Ň	of Ne Natu
		temperatu	owable for		4	CHOKE SIZE	8	TUBB OIL AND GAS	ATIO TI	Zu4u Pacheco St. Santa Fe, NM 87505	TION	State of New Mexico s and Natural Resour
		re of 60° F.	the pool ir ent toleran		30	TBG. PRESS.	Scheduled		EST	0.		rces Dep
						ALLOW- ABLE					<b>IVISION</b>	artment
Date	Printed name and title 08/11/97	Signature BRUCE WOODARD	complete t	horohya	24	HOURS					_	
	ne and ti 97	OODARD	leve to the bes	untific that	0	WATER BBLS.						
	l fe					GRAV.		County				
=	10	PROD. OPNS. MGR	hy knowledge and belief.	I harahy artify that there have information is true and	0	ORAV. OIL OIL BBLS.						
i elephone No.	915/682-6612	JS. MGR.	ye and b	nation is t	101	GAS M.C.F.	Special					Form C-116 Revised 1/1,
NO,	12		slief.		NA	GAS - OIL RATIO CU.FT/BBL.						Form C-116 Revised 1/1/89

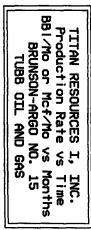
.



TITAN RESOURCES I, INC. Production Rate vs Time BB1/Mo or Mcf/Mo vs Months BRUNSON-ARGO NO. 15 DRINKARD

Production Dil Gas Water





Production Oil \_\_\_\_\_ Gas \_\_\_\_\_ Water \_\_\_\_\_

#### WELL DATA SHEET

#### APPLICATION FOR EXCEPTION TO RULE 303-A TO ALLOW DOWN-HOLE COMMINGLING OF A DUALLY COMPLETED WELL

- OPERATOR: TITAN RESOURCES I. INC.
- LEASE NAME: BRUNSON-ARGO
- WELL NO: 15

۰.

~

LOCATION: Unit Letter: F; 1880 ft FNL and 1980 ft FWL, Section 10, T-22-S, R-37-E Lea County, NM

	UPPER ZONE:	LOWER ZONE
POOL:	TUBB OIL AND GAS	DRINKARD
PERFORATIONS:	5883' - 6127'	6280' - 6500'
PRODUCING METHOD:	FLOW	PUMP
OIL: Bbl/ Day	0	1
GAS: Mcf/Day	101	145
WATER: Bbl/Day	0	0
GOR:	NA	145,000
TOP OIL ALLOWABLE:	NA	142 Bbl/Day
GOR LIMIT:	NA	6,000
GAS LIMIT:	18,425 Mcf/Mo	852 Mcf/Day
BOTTOM-HOLE PRESSURE, psi:	643 psi at 6007' *	377 psi at 6500 ' *
BOTTOM-HOLE PRESSURE EXTRAPOLATED TO 6500', psi:	696 psi	377 psi
OIL GRAVITY,° API	NA	37.1
GAS GRAVITY:	0.68	0.68
WATER:	NA	NA

\* BHP Measured with Pressure Bomb

NOTE: Since no liquids are produced from the Tubb zone, and since the gas produced from each zone is the same gravity and essentially the same composition, incompatibility of fluids in the wellbore will not exist.

## COMPUTATION OF VALUE OF HYDROCARBONS BEFORE AND AFTER COMMINGLING

Lease Name and Well No: BRUNSON-ARGO NO. 15

• ~

.

	Upper Pool	Lower Pool	Commingled
Pool Name:	Tubb Oil and Gas	Drinkard	Tubb Oil and Gas & Drinkard
Daily Production: Mcf/ Day Bbl /Day	101 0	145 1	246 1
Gravity:	NA	37.1	37.1
Selling Price: \$/Mcf: \$/Bbl:	1.8718 0	1.8718 18.75	1.8718 18.75
Gross Daily Income: \$	189.05	271.41	460.46
Sum of Income of Individual Pools:	271.41		

Note: The value of the commingled production will not be less than the sum of the values of the individual streams.

## **PROPOSED FORMULA FOR ALLOCATION OF PRODUCTION**

TITAN recommends that the downhole commingled production from the BRUNSON-ARGO No. 15 be allocated based on producing rates shown on the attached forms C-116.

	TUBB OIL AND GAS	DRINKARD
GAS	41%	59%
OIL	0%	100%