STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

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LAND OFFICE		
TRANSPORTER	OIL	
	GAS	
OPERATOR		
PRORATION OFFICE		

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-104
Revised 10-1-78

RECEIVED
JUL 15 1981
O. C. D.
ARTESIA, OFFICE

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Operator
MESA PETROLEUM CO.

Address
1000 VAUGHN BUILDING, MIDLAND, TEXAS 79701

Reason(s) for filing (Check proper box)
New Well [X]
Recompletion [ ]
Change in Ownership [ ]
Change in Transporter of: Oil [ ] Dry Gas [ ] Casinghead Gas [ ] Condensate [ ]
Other (Please explain)

If change of ownership give name and address of previous owner

DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
SPRING FEDERAL	1	~~UNDESIGNATED~~ ABO	State, Federal or Fee NM	32167

Location
Unit Letter M : 660 Feet From The SOUTH Line and 660 Feet From The WEST
Line of Section 6 Township 6S Range 26E , NMPM, CHAVES County

DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil [ ] or Condensate [X]: KOCH OIL COMPANY
Address (Give address to which approved copy of this form is to be sent): P O BOX 1558, BRECKENRIDGE TX 76024

Name of Authorized Transporter of Casinghead Gas [ ] or Dry Gas [X]: TRANSWESTERN PIPELINE CO.
Address (Give address to which approved copy of this form is to be sent): P O BOX 2018 ROSWELL, NM 88201

If well produces oil or liquids, give location of tanks.	Unit	Sec.	Twp.	Rge.	Is gas actually connected?	When
	M	6	6S	26E	~~NO~~ Yes	9-18-81

If this production is commingled with that from any other lease or pool, give commingling order number:

COMPLETION DATA

Designate Type of Completion – (X)	Oil Well	Gas Well	New Well	Workover	Deepen	Plug Back	Same Res'v.	Diff. Res'v
		X	X					

Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.
5-24-81	7-2-81	4415'	4370'
Elevations (DF, RKB, RT, GR, etc.)	**Name of Producing Formation**	**Top Oil/Gas Pay**	**Tubing Depth**
3777.4' GR	ABO	3862'	3771'
Perforations			**Depth Casing Shoe**
3862'---4003'			4412'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17 1/2"	13 3/8"	827'	500/200/200/500
11"	8 5/8"	1758'	500/200/300
7 7/8"	4 1/2"	4412'	700/350
	2 3/8"	3771'	

TEST DATA AND REQUEST FOR ALLOWABLE

(Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)

OIL WELL

Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas lift, etc.)	
Length of Test	**Tubing Pressure**	**Casing Pressure**	**Choke Size**
Actual Prod. During Test	**Oil-Bbls.**	**Water-Bbls.**	**Gas-MCF**

Pulled ID-3
Add LT-KOC
9-25-81

GAS WELL

Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
1812	4 HOURS	-	-
Testing Method (pitot, back pr.)	**Tubing Pressure (Shut-in)**	**Casing Pressure (Shut-in)**	**Choke Size**
BACK PRESSURE	980	880	24/64"

CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

XC: NMOCD (6), TLS, CEN RCDS, ACCTG, ROSWELL, MEC, LAND, D&M, TW, K, PARTNERS, FILE, EEB, LMC, MTS PARTNERS (3)

R. E. MATHIS (Signature)
REGULATORY COORDINATOR (Title)
7-10-81 (Date)

OIL CONSERVATION DIVISION

APPROVED SEP 25 1981, 19
BY W. A. Gressett
TITLE SUPERVISOR, DISTRICT II

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

NEW MEXICO OIL CONSERVATION DIVISION

P. O. DRAWER "DD"

ARTESIA, NEW MEXICO 88210

RECEIVED

SEP 24 1981

O. C. D.
ARTESIA, OFFICE

AIR MAIL

NOTICE OF GAS CONNECTION

DATE September 21, 1981

This is to notify the Oil Conservation Division that connection for the purchase of gas from the Mesa Petroleum Co. /
Operator

Spring-Federal
Lease

Well #1-Unit Letter M ~~unknown~~
Well Unit

6-6S-26E, Chaves County
S.T.R.

~~Wildcat~~ Und (Abo)
Pool

Transwestern
Name of purchaser

was made on September 18, 1981

Transwestern Pipeline Company
Company

H. N. Aicklen
Representative

Supervisor Gas Purchase Contract Administration
Title

cc: Operator
Oil Conservation Division - Santa Fe

NEW MEXICO OIL CONSERVATION [illegible]

MULTIPOINT AN[illegible]ONE POINT BACK PRESSURE TEST [illegible]OR GAS WELL

Revised 4-1-65

RECEIVED

JUL 17 1981

O. C. D.

ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 7-2-81	
Company: MESA PETROLEUM CO.		Connection: UNCONNECTED			Unit
Pool: UNDESIGNATED ABO		Formation: ABO			
Completion Date: 7-2-81	Total Depth: 4415'	Plug Back TD: 4370'	Elevation: 3777'	Farm or Lease Name: SPRING FEDERAL	
Csg. Size: 4 1/2" / Wt.: 10.5 / d: / Set At: 4412'		Perforations: From 3862' To 4003'		Well No.: 1	
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: / Set At: 3771'		Perforations: From OPEN ENDED To		Unit: M / Sec.: 6 / Twp.: 6S / Rge.: 26E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: NONE		County: CHAVES	
Producing Thru: TUBING	Reservoir Temp. °F: 105° @ 4415'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3771	3771	.65	2	3		CHOKE		

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					980		880		72 HR SI
1.	CHOKE 18/64"	850	-	80	850	85	815		1 HR
2.	COEFFICIENT 21/64"	775	-	80	775	85	780		1 HR
3.	24/64	705	-	80	705	85	730		1 HR
4.	26/64	620	-	80	620	85	700		1 HR
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	1.331	CHOKE	850	.9813	1.240	-	1377
2.	1.817	CHOKE	775	.9813	1.240	-	1713
3.	2.388	CHOKE	705	.9813	1.240	-	2049
4.	2.794	CHOKE	620	.9813	1.240	-	2108
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.

Specific Gravity Separator Gas _____ XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX _____

Critical Pressure _____ P.S.I.A. _____ P.S.I.A.

Critical Temperature _____ R _____ R

P_c 880 P_c^2 774

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		815	664	110
2		780	608	166
3		730	533	241
4		700	490	284
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.2116$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.856$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3,800$

Absolute Open Flow 3800 Mcfd @ 15.025

Angle of Slope θ 62.1°

Slope, n .53

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JAMES CRAIG	E. L. BUTTROSS, JR. EAB	