



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE Nov. 19, 1981

RE: Proposed MC _____
Proposed DHC α _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 11/5/81
for the N. B. Martin & Assoc. Martin Whitaker 58 EQ-23W-SW
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve
Note correct pool names - W.C. Balling and W.C. Dakota

Yours truly,

Ernest O. Chavez



W. B. MARTIN & ASSOCIATES, INC.

709 North Butler, Farmington, New Mexico 87401

Phone: (505) 326-4507

Oil Conservation Commission
State Petroleum Engineer
Director Oil Conservation Division
P. O. Box 2088
Santa Fe, N.M. 87501

ATTN: Richard Staments

Accompanying this note is the required State Oil and Gas Conservation information for Letter of Intent to Comingle Gallup and Dakota formations for Well ~~#57 Martin-Whittaker~~ and ~~#58 Martin-Whittaker~~. The following information is in compliance with Rule 303 Section C-2 page E-3 in Oil and Gas Conservation Division for State of New Mexico.

a.) W.B. Martin & Associates, Inc.
709 N. Butler
Farmington, N.M. 87401

b.) #57 Martin-Whittaker
970' FNL and 1850' FWL
NW $\frac{1}{4}$ Sec 5 T23N R5W
Rio Arriba County, N.M.

Gallup-Semilla-Greenhorn-Dakota

c.) See attached Lease-Ownership Plat

d & e.) See attached Completion Report. Reference P. 3 & 4

Dakota C & D 6482-87 6505-10
BHP=2000 psi
IPS=12 BOPD and 10-30 MCFD
Oil gravity=40° API @ 60° F

Dakota "A" 6371-78
BHP=2000 psi
IPS=3 BOPD, 9 BOPD, 10 MCFD
Oil gravity=40° API @ 60° F
RW=.18-M

Greenhorn-Semilla 5992-98 6001-02 6057-74 6288-6302
BHP =1105 psi + slow build up but still increasing pressure.
IPS=7 BOPD: 10 MCFD
Oil gravity=42° API @ 60° F

RECEIVED

NOV 05 1984

OIL CON. DIV.
DIST. 3

#58 Martin-Whittaker
Summary Report

a.) W.B. Martin & Associates, Inc.
709 N. Butler
Farmington, N.M. 87401

b.) #58 Martin-Whittaker
1830' FNL and 840' FWL
NW $\frac{1}{2}$ Sec 9 T23N R5W
Rio Arriba County, N.M.

Gallup-Semilla-Greenhorn-Dakota

c.) See attached Lease-Ownership Plat

d & e) See attached Completion Report. Reference P. 7 & 8

Dakota C & D
6434-67' KB
BHP=2000 psig
IPS=6 BOPD and 130 MCFD
Oil gravity=40° API

Dakota "A"
6231-36
BHP=1400 psig
IPS=1.5 BOPD and 10 MCFD
Oil gravity=42° field test

Semilla-Greenhorn
6008-6254
BHP=1100 psig + low permeability
IPS=6 BOPD and 15 MCFD
Oil gravity=44° API

Gallup
5345-5554
BHP=1200 psig
IPS=2 BOPD+ and 50 MCFD
Oil gravity=42.5° API

Upper Gallup
4936-4976
BHP=1060 psi
IPS=2 BOPD and 30 MCFD

Total Daily production from swabbing after acid breakdown
approximately 17.5 EOPD 230 MCFD

IP from C-104 20 BOPD AND 220 MCFD and 40 bbl load water per day.

#58 Martin-Whittaker
Summary Report (continued)

- f.) See above section (d & e)
- g.) See above section (d & e) These wells lie within two other known Gallup-Dakota comingled pools South Lindrith Gallup-Dakota to the east and Counselors Gallup-Dakota to the west. All formation fluids are compatible from after swab pre-frac emulsion tests.
- h.) Usually initial potential swabbing is 20% greater with fluids than pumping. See section (d & e)
- i.) Due to the tortuosity (Interconnected permeability) of the Semilla, Greenhorn and Dakota "A" and its lower porosity the productive life of these two intervals is long term but low volume, volume contribution factor of 15% 4 BOPD and 25 MCFD Total of all three intervals. Gallup interval will contribute 40% of the oil and 40% gas for total 6-7 BOPD and 100 MCFD gas, Dakota C & D factor of 7 BOPD 45% oil and 55% gas of 150 MCFD.
- j.) Adjacent operators have been notified in writing of the proposed comingling. See attached.

#58 Martin-Whittaker
Completion Report

Dakota C & D

- 1.) Spot 150 gallons of 10% Acetic Acid and w/10% Methanol and Surfactant and Inhibitor.
- 2.) Perforate Dakota C & D @ 6434-40 and from 6459-67' KB total 60 .375 Dia Holes.
- 3.) Set pakr @ 6209 breakdown Dakota C & D zone w/1000 gallon 10% Acetic Acid with 10% Methanol & Surfactant and Inhibitor ISIP=1700 psi F.G.=.68 psi/ft
- 4.) After recovering Acid Water SIW for 1 hour. Pressure build=up to 600 psi. SIW for 24 hours SITP 1800 psi Blew down in 1.5 hrs. w/1/4" choke. IFL @ 500' KB. Swabbed back 8 bbls 75% oil & 25% water. BHP=2000 psi Approx. 6 BO 130 MCFD Oil gravity 40°
- 5.) Frac'd Dakota C & D with 78,000 gal 20# x-link and 103,000# 20/40 sand at Avg injection rate of 32.5 BPM @ 2800 psi. ISIP=2800 psi 15 min=2200 psi

Dakota "A"

- 1.) Set R.B.P. above Dakota C & D P.T. to 3000 psi. Held.
- 2.) Perforate Dakota "A" zone @ 6321-36 with 48 .375 Dia Holes.
- 3.) Set pakr @ 6272' KB breakdown Dakota "A" with 500 gallons 10% Acetic Acid w/10% Methanol Surfactant and Inhibitor ISIP=1850 psi
- 4.) SIW for 1 hour SITP=80 psi IFL @ 6100' KB SIW for 24 hours SITP 450 psi IFL @ 4100' KB Pulled 10 bbls w/20% oil and 8 bbls formation water BHP=1400 psi, very low porosity and permeability zone possible production 1.5 BOPD and 10 MCFD Not economic to frac. Oil gravity field test 42°.

Semilla-Greenhorn

- 1.) Set R.B.P. above Dakota A and P.T. to 3000 psi. Held.
- 2.) Perforate Semilla-Greenhorn interval from 6008-16, 6021-24, 6235-54 total 48 .375 Dia Holes.
- 3.) Set pakr @ 5982' KB Breakdown with 600 gal 10% Acetic Acid with 10% Methanol Surf, Inhibitor.
- 4.) After recovering Acid Water SIW for 12 hours 200 psi IFL=1600' KB Pulled 32 bbls fluid 10% oil approximately 3 BOPD.
- 5.) Re-acidize Semilla-Greenhorn with 5000 gal 10% Acetic Acid with above additives. ISIP=3400 psi.
- 6.) After recovering Acid Water SIW for 24 hours. SITP=475 psi IFL @ 4200' KB Swabbed 6 BOPD and 10-20 MCFD Oil gravity 44° API. Not economic to frac. BHP=1100 psi Slow build-up Well will sustain a column of water without any fluid loss.

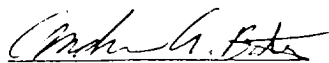
Gallup

- 1.) Set R.B.P. above Semilla-Greenhorn P.T. to 3000 psi.
- 2.) Perforate Gallup interval 5345-5554 total 100 .375 Dia Holes.
- 3.) Set pakr @ 5280' KB breakdown with 1500 gallons 10% Acetic Acid with above additives
- 4.) After recovering Acid Water.
- 5.) SIW for 24 hours SITP-1000 psi blew down in 1½ hours IFL @ 4800' KB Pulled 2 bbls oil BHP=1200 psi Oil gravity 42.5° 50 MCFD
- 6.) Frac Gallup with 72,634 gal 2% slk water and 86,000# 20/40 sand. ISIP-975 15 min-780 psi

Upper Gallup

- 1.) Set R.B.P. above Gallup P.T. to 2500 psi. Held.
- 2.) Perforate Upper Gallup 4936-4976' KB total 48 .41 Dia Holes.
- 3.) Pakr set @ 4879' KB breakdown Gallup with 500 gallons 10% Acetic Acid with above additives.
- 4.) After recovering Acid Water SIW for 24 hours SITP-500 psi Bled down ¼" choke in 1 hour and IFL @ 3500' KB. Pulled 6 bbls 40% oil. BHP Upper Gallup=1060 psi. Production 2 BOPD and 30 MCFD.

Sincerly,


Andrew A. Bates

cc File #57 & #58
W.B. Martin, Jr.
Frank Chavez
Aztec Oil & Gas Conservation
Amoco Production Company



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

REQUEST FOR ALLOWABLE
AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

W.B. Martin & Associates, Inc

709 North Butler, Farmington, NM 87401

Reason(s) for filing (Check proper box)

Well ☒ Completion ☐ Change in Ownership ☐
Change in Transporter of: Oil ☒ Dry Gas ☐
Casinghead Gas ☐ Condensate ☐

Other (Please explain)

Change of ownership give name
Address of previous owner

DESCRIPTION OF WELL AND LEASE

Well Name: Martin-Whittaker Well No.: 58 Pool Name, Including Formation: S. Lindrith Gallup-Dakota Kind of Lease: Federal
Section: E 1830' North 840' West
Line of Section: 9 Township: 23N Range: 5W NMPM Rio Arriba

SIGNATURE OF TRANSPORTER OF OIL AND NATURAL GAS

Signature of Authorized Transporter of Oil ☒ or Condensate ☐ Address (Give address to which approved copy of this form is to be sent): P.O. Box 256, Farmington, NM 87401
Signature of Authorized Transporter of Casinghead Gas ☒ or Dry Gas ☐ Address (Give address to which approved copy of this form is to be sent): P.O. Box 1492, El Paso, TX 79978
Well produces oil or liquids, location of tanks: Unit: E Sec: 9 Twp: 23N Rge: 5W Is gas actually connected? No-Waiting on Hookup When

Is production commingled with that from any other lease or pool, give commingling order number

Designate Type of Completion - (X) Oil Well ☒ Gas Well ☐ New Well ☒ Workover ☐ Deepen ☐ Plug Back ☐ Same Restv. ☐ Drill Hole ☐
Spudded: 3-22-84 Date Compl. Ready to Prod.: 10-18-84 Total Depth: 6531' P.B.T.D.: 6530'
Casing (D.F., R.K.B., R.T., G.R., etc.): 5614' GR Name of Producing Formation: Gallup-Dakota Top Cu/Gas Pay: 4936 Gallup Tubing Depth: 5320'
Casing: 1936'-6467' Depth Casing Shoe: 6530'

TUBING, CASING, AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
2 1/2"	9 5/8" 32#/ft	251'	206.50ft ³
3/4"	7" 23#/ft	4431'	484ft ³
1/2"	4 1/2" 11.60#/ft	6530'	304.5ft ³

DATA AND REQUEST FOR ALLOWABLE

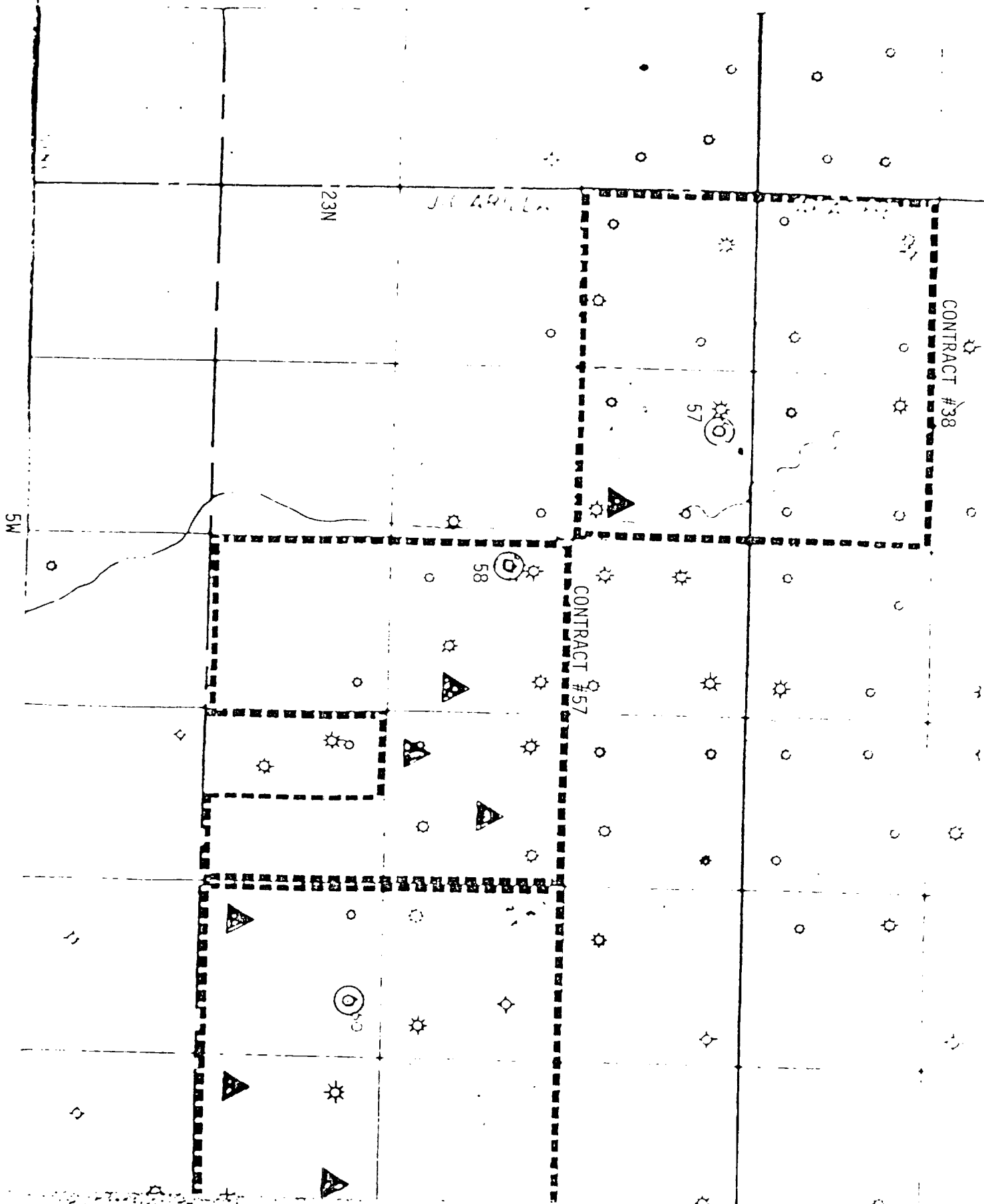
Test must be after recovery of total volume of load oil and must be equal to or exceed top oiler able for this depth or be for full 24 hours

First New Oil Run To Tanks: 0-18-84 Date of Test: 10/19/84 Producing Method (Flow, pump, gas lift, etc.): Flowing
of Test: 4 Tubing Pressure: 20 Casing Pressure: 800 Choke Size: 2"
Prod. During Test: Obbls Oil - Bbls: 20 Water - Bbls: 40 Gas - MCF: 220

ELL

Prod. Test - MCF/D Length of Test: Bbls. Condensate/MCF Gravity of Condensate
Method (pneum., back pr.)

PLAT
DOWN HOLE COMINGLED
GALLUP and DAKOTA
#57 & #58 MARTIN-WHITTALER





W. B. MARTIN & ASSOCIATES, INC.

709 North Butler, Farmington, New Mexico 87401

Phone: (505) 326-4507

October 31, 1984

Amoco Production Co.
Attention: Tim Clauson
P. O. Box 800
Denver, Co. 80201

Re: #57 Martin-Whittaker
970' FNL & 1850' FNL
NW $\frac{1}{4}$ Sec 5 T23N R5W
Rio Arriba County, N.M.

and

#58 Martin-Whittaker
1830' FNL & 840' FWL
NW $\frac{1}{4}$ Sect 9 T23n R5W
Rio Arriba County, NM

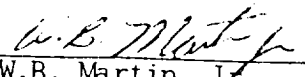
Mr. Clauson,

The New Mexico Oil Commission has deemed the aforementioned wells to be Wildcat Gallup, Wildcat Dakota.

Under Rule 303 Section C-2 Page E-3 of the State Oil and Gas Conservation Commission Rules and Regulations, we are applying for down hole commingling of the Dakota, Greenhorn and Gallup formations.

Pursuant to rule 303 we are informing adjacent operators of our application. If you have any questions or comments please feel free to contact me at any time.

Sincerely,


W.B. Martin, Jr.

Enclosures-application