CONTINENTAL OIL COMPANY

P. O. Box 3312
Durango, Colorado
October 8, 1964

-237

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico
Attn: Mr. D. S. Nutter - Chief Engineer

Gentlemen:

Attached are three copies of a letter from the United States Geological Survey, Regional Oil and Gas Supervisor, approving Continental Oil Company's application to commingle the liquid production from the Otero-Gallup Pool and Basin Dakota Pool on our Northeast Haynes Apache Lease in T24N, R5W, Rio Arriba County, New Mexico.

Application to the Commission was made September 3, 1964, and is awaiting the above mentioned approval before processing of the application can be initiated.

Very truly yours,

F. E. Ellis
Assistant District Manager
Durango District
Production Department

GAB/sf

IN REPLY REFER TO:

RECEIVED
DURANGO PROD.
OCT 8 1964
OFFICE MGR.

'64 OCT 13

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Drawer 1857
Roswell, New Mexico

October 6, 1964

Continental Oil Company
P. O. Box 3312
Durango, Colorado

Attention: Mr. T. E. Ellis

Return to Carroll for copies for GAB

Gentlemen:

Carroll, please pass to FVM

Your letter of September 10 with attachments, requests approval to commingle Gallup formation oil and Dakota formation condensate from five dually completed wells on Jicarilla Tribal lease Contract No. 36.

According to your proposal liquid hydrocarbons from the Dakota formation will be metered prior to being commingled with the Gallup oil. By diagram of the central battery you show test facilities to allocate production back to each well in the system based on a test split.

The method you propose for the commingling is hereby approved. Any change in the system must receive prior approval from this office. Form 9-361, Lessee's Monthly Report of Sales and Royalty, must show all computation used in the calculation of oil volume for each formation.

You are requested to notify our Farmington office when the installation is completed so that a field inspection of the system can be made.

Sincerely yours,

Billy J. Shoger

BILLY J. SHOGER
Acting Oil and Gas Supervisor

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

September 23, 1964

COPY

Continental Oil Company
P. O. Box 3312
Durango, Colorado

Attention: Mr. F. E. Ellis

Gentlemen:

Reference is made to your letter dated September 3, 1964, wherein you request authority to commingle the liquid production from the Otero-Gallup Oil Pool and the Basin Dakota Gas Pool on your Northeast Haynes Apache Lease in Township 24 North, Range 5 West, Rio Arriba County, New Mexico.

Inasmuch as this is Indian land, it will be necessary for you to secure the approval of the United States Geological Survey before we can approve the application. Upon receipt of approval to the commingling from the regional director of the United States Geological Survey, we will be happy to process your application.

Very truly yours,

D. S. Nutter
Chief Engineer

DSN:sg

cc: United States Geological Survey - Roswell

CONTINENTAL OIL COMPANY

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MAIN OFFICE

'64 SEP 11 AM 8 00

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr. - Secretary-Director

Gentlemen:

It is respectfully requested by this application for administrative approval of an exception to Rule 303(a) of the Commission Rules and Regulations to permit commingling of hydrocarbon liquid production from five wells dually completed in the Otero-Gallup pool and the Basin Dakota pool on our Northeast Haynes Apache lease in T24N, R5W, Rio Arriba County, New Mexico, without separately metering the production from each pool. The ownership of both zones is identical. The specific dual completion wells proposed for installation of commingling-metering facilities and the location of each well is as follows:

Northeast Haynes Well No. 3, Unit F, Section 15, T24N, R5W
Northeast Haynes Well No. 4, Unit L, Section 21, T24N, R5W
Northeast Haynes Well No. 5, Unit L, Section 22, T24N, R5W
Northeast Haynes Well No. 6, Unit D, Section 15, T24N, R5W
Northeast Haynes Well No. 8, Unit F, Section 15, T24N, R5W

All wells completed in the Otero-Gallup pool are marginal and incapable of producing top unit allowable for the pool. Production from the Basin Dakota pool gas wells is liquid hydrocarbons produced after separation from the Dakota gas which is prorated in accordance with the allowables set by the Commission. As such, the liquid production from the Dakota wells is dependent upon the gas take according to individual well allowables. The Dakota wells produce an average of 15 barrels of 59° API gravity condensate per MMCF of gas produced.

Attached is a tabulation of the required data pertaining to production, gravities and values of the liquid hydrocarbons, and anticipated volumes to be commingled. A schematic diagram of the proposed metering and commingling system to be installed at each dual completion well and a diagram showing production and testing facilities at the central battery are also attached.

Presently, the Gallup oil production is sold through the Llaves pipeline at the central battery. The Dakota condensate production is sold by trucking. Under present operations, storage tanks are located at each Dakota well to store the Dakota condensate production until sufficient volume is available for trucking.

The proposed commingling installations shall be operated in accordance with the provisions of the Commission "Manual for the Installation and Operation of Commingling Facilities".

If any additional information is required, please advise.

Very truly yours,

F. E. Ellis
Assistant District Manager
Durango District
Production Department

GAB/ca

cc: E. A. Austin, Continental Oil Company, Denver, Colorado
A. T. Smith, Continental Oil Company, Denver, Colorado

COMMINGLING DATA
N. E. HAYNES GALLUP-DAKOTA DUALS
T24N, R5W, Rio Arriba County, New Mexico

1. Daily Average Production for 90-Day Period (5-1-64 to 8-1-64):

	Gallup (Oil)	Dakota (Condensate)
N. E. Haynes No. 2 (Single Dakota)	-	4
N. E. Haynes No. 3 (Gallup-Dakota Dual)	26	2
N. E. Haynes No. 4 (Gallup-Dakota Dual)	22	2
N. E. Haynes No. 5 (Gallup-Dakota Dual)	19	2
N. E. Haynes No. 6 (Gallup-Dakota Dual)	4	4
N. E. Haynes No. 7 (Single Dakota)	-	2
N. E. Haynes No. 8 (Gallup-Dakota Dual)	10	0 (SI)
N. E. Haynes No. 9 (Single Gallup)	53	-
N. E. Haynes No. 10 (Single Gallup)	22	-
TOTAL	156 BOPD	16 BOPD*

* Dakota production low due to reduced gas takes during summer months.

2. Top Unit Allowable: Gallup - 94 BOPD
Dakota - No oil allowable - Prorated Basin Dakota Gas.

3. Crude Purchaser: Llaves Pipeline Ltd.-Shell Oil Company

4. Royalty Interest Owner: Jicarilla Apache Tribe

5. Liquid Hydrocarbon Gravities: Gallup - 43.6° API
Dakota - 59.4° API

6. Commingled Liquid Hydrocarbon Gravity (Assuming 80% Gallup - 20% Dakota):
47° API

7. Value of Liquid Hydrocarbons: Gallup - $2.35 per bbl.(no penalty)
Dakota - $2.20 per bbl. - Flat Price

8. Value of Commingled Hydrocarbons: $2.29 per bbl. ($.06/bbl. penalty)

9. Anticipated Producing Rates: Gallup - 140 BOPD (7 wells)
Dakota - 35 BOPD (5 wells)

10. Value Calculations: (Based on average producing rates - total lease)

Gallup - 140 BOPD x $2.35 = $329.00
Dakota - 35 BPD x $2.20 = 77.00
Total Separate Value = $406.00

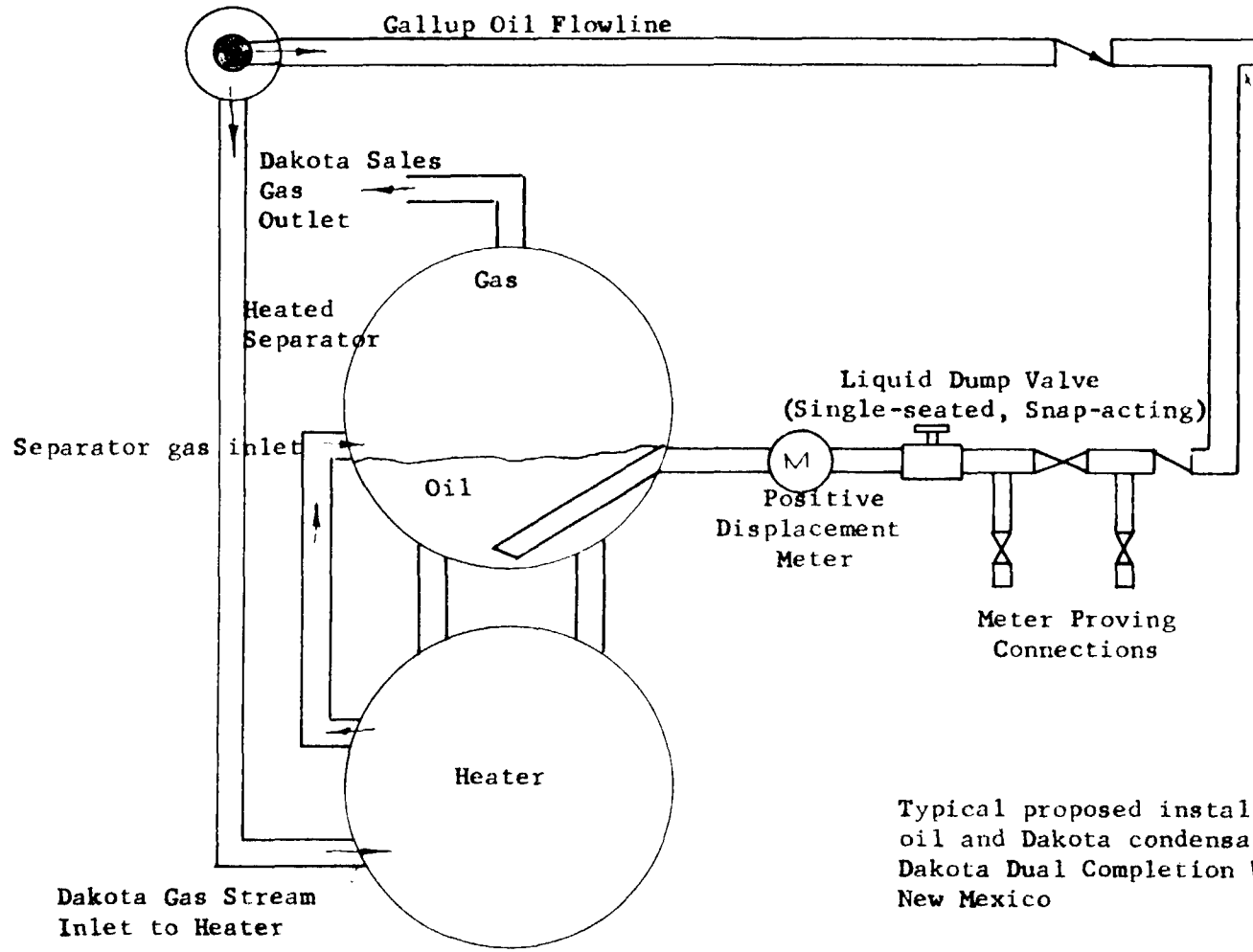
Commingled Value - 175 BPD x $2.29 = $400.75

A volume increase of 3 percent would be expected for the Dakota condensate due to staging the liquid to 250 psi pressure (Gallup system) rather than to atmospheric stock tank pressures. This would increase total lease production from 175 BOPD to 178 BOPD for a value of 178 BOPD x $2.29 = $407.62. Therefore, the value of the commingled production should not be less than the value of the production from each common source of supply.

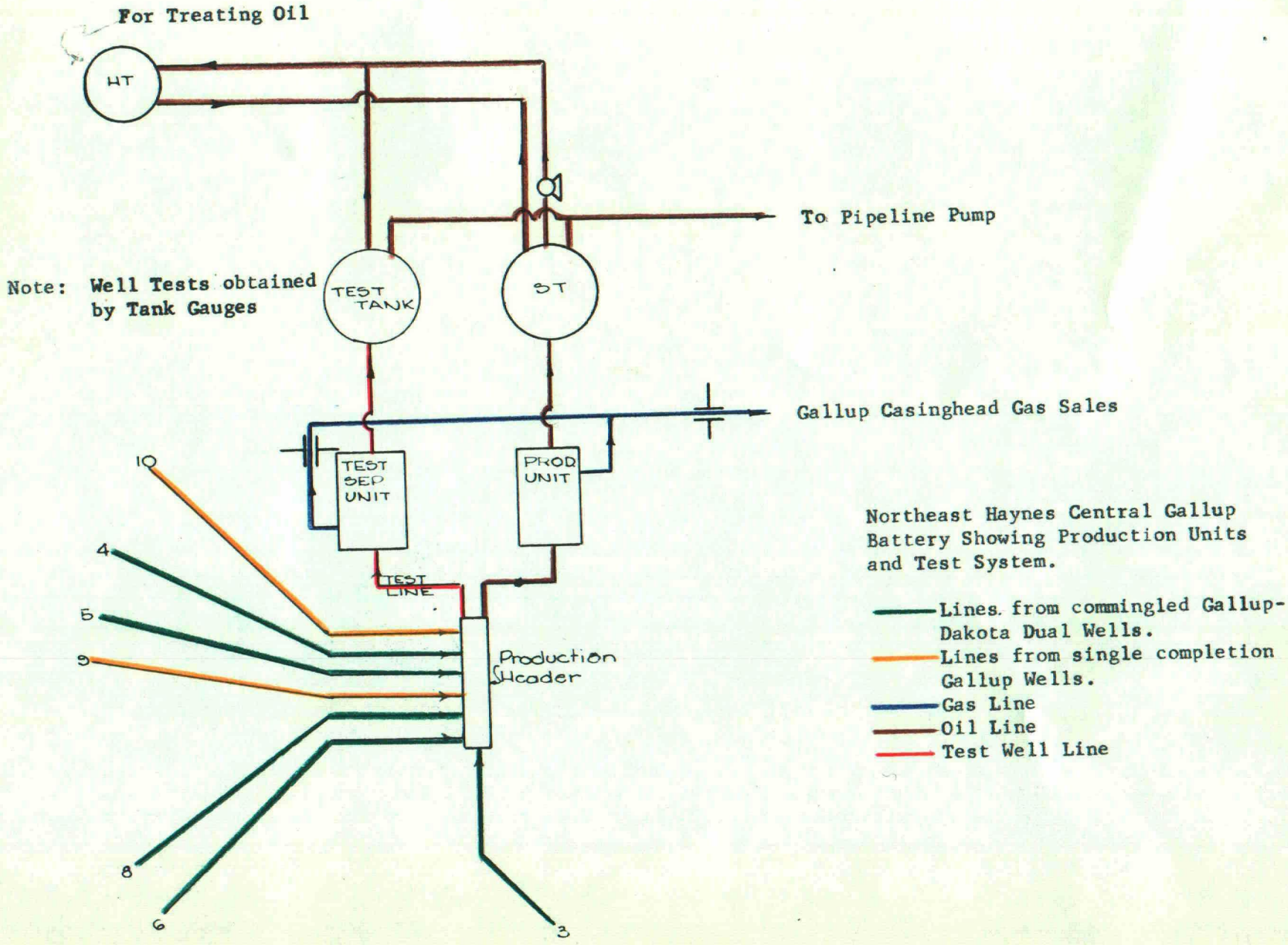
The amount of Dakota condensate production will be dependent upon the gas takes from each Dakota gas well which is prorated according to the Basin-Dakota gas allowables.

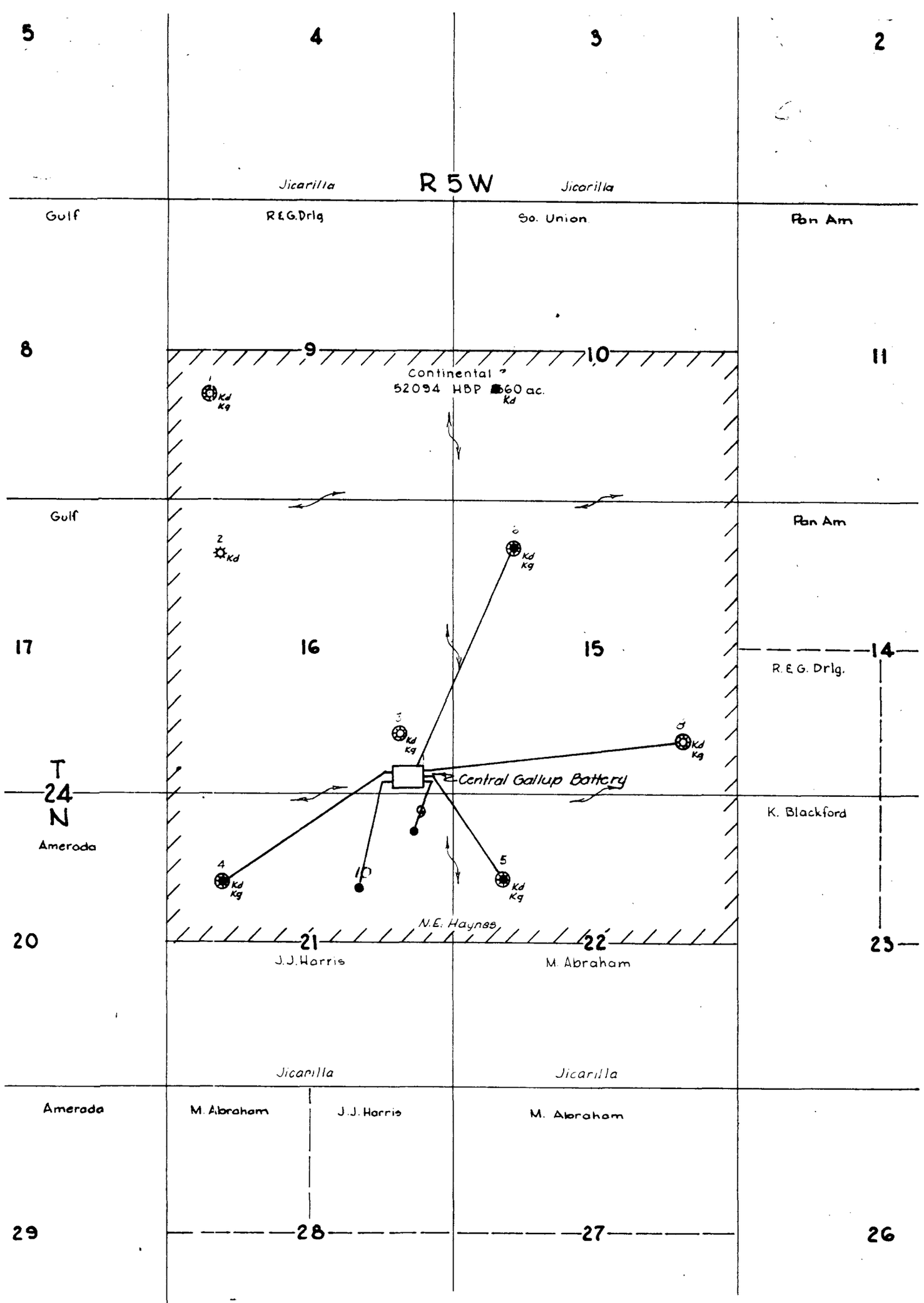
Additional Gallup development drilling is anticipated in the near future which will increase total Gallup production for the lease by approximately 100 BOPD. This would decrease the API gravity of the commingled hydrocarbons, resulting in a price increase for the commingled lease production.

Dual Gallup (oil)-Dakota (gas) Well



Typical proposed installation for surface commingling of Gallup oil and Dakota condensate production from Northeast Haynes Gallup-Dakota Dual Completion Wells No's 3, 4, 5, 6, 8, Rio Arriba County, New Mexico


For Treating Oil
HT
To Pipeline Pump
Note: Well Tests obtained by Tank Gauges
TEST TANK
ST
Gallup Casinghead Gas Sales
TEST SEP UNIT
PROD UNIT
TEST LINE
10
4
5
9
8
6
3
Production Header
Northeast Haynes Central Gallup Battery Showing Production Units and Test System.
Lines from commingled Gallup-Dakota Dual Wells.
Lines from single completion Gallup Wells.
Gas Line
Oil Line
Test Well Line



CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT

DRAWN	SCALE 1" = 2000'	FILE NO.
CHECKED	DATE	
APPROVED	SHEET ____ OF ____	

NE. HAYNES LEASE

Rio Arriba Co., N. Mex.