265

RAY SMITH DRILLING COMPANY

3300 REPUBLIC BANK BUILDING

DALLAS, TEXAS 75201

June 16, 1967

OIL OPERATIONS FOR:
RAY SMITH-OIL PRODUCER
RAY SMITH DRILLING CO.
RAY SMITH TRUST
CHEMICAL EXPRESS, INC.
CEMENT TRANSPORTS, INC.

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

'67 JUN 19 AM 8 23

Your Order No. R-3112
Shugart 18-Queen Unit
Eddy County, New Mexico

We submit the following information for your consideration, and we request your approval for conversion of Well #6 on subject Unit from a producing status to one of injection.

Rule 701-E

5. Your Order No. R-3112 originally authorized this waterflood project.

   Our reason for this converstion is that the well experienced premature water breakthrough and, after extensive testing, it was decided to convert it to injection status. It was producing 100% water.

   The well has 5-1/2" casing and had been producing from open-hole. Rods and tubing were pulled, well cleaned out and a cement plug (10' of pea gravel and 13' of hydromite) was placed directly under the producing formation at a depth of 3,229' to facilite injection into the producing zone. Then we re-ran the 2-3/8" tubing on a packer which was set at a depth of 2,940' and well placed on injection service April 1, 1967.

   Other pertinent data is shown below in complying with Section B of this regulation.

Rule 701-B

1. Attached is a plat showing the location of subject well and its relationship to the other wells in this Unit. The formation involved is the Queen Sand. See Exhibit "A" attached.

2. See Exhibit "B" attached.

3. See Exhibit "C" attached.

4. The formation is the Queen Sand at a depth of 3,050' to 3,095'; water is the fluid to be injected; anticipated volume is 4,400 bbls per month and average injection pressure is 1,600#; the source of water -- purchased from the Double Eagle Corporation of New Mexico.

Rule 701-B (Cont'd)

5. A copy of this letter and a complete set of the enclosed material is being sent to the State Engineer Office as shown below.

Your approval of this conversion will be genuinely appreciated, and we assure you that, in the future, your regulations will be followed in a timely manner. If there is any additional information needed, let us hear from you, and we shall endeavor to furnish it.

Very truly yours,

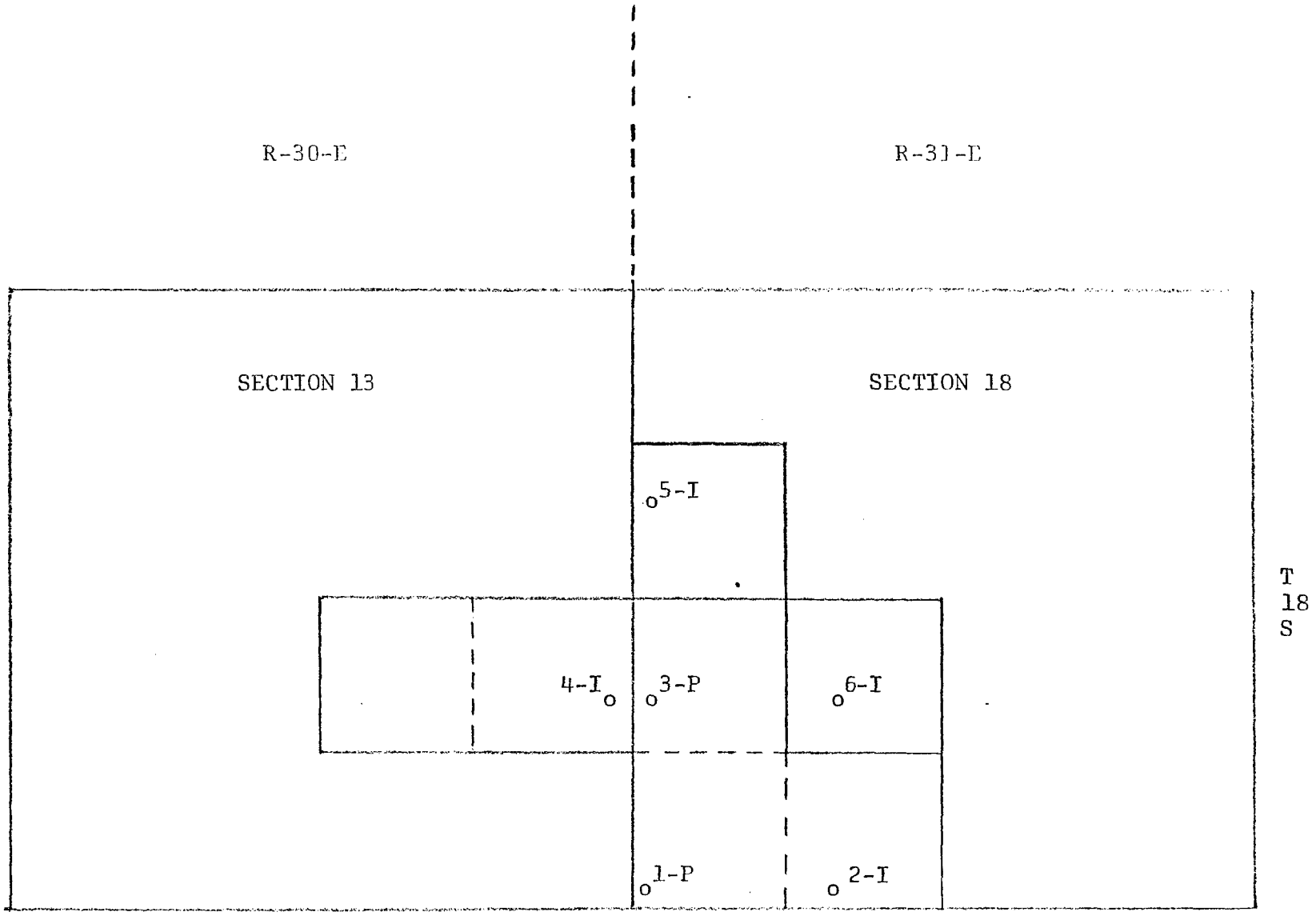
RAY SMITH DRILLING COMPANY

(Miss) Nell M. Heflin

NMH:s
Enclosures
cc: State Engineer Office (w/encls)
Capitol Building
Santa Fe, New Mexico

W. H. Cravey - Artesia

EXHIBIT "A"



SHUGART 18-QUEEN UNIT
EDDY COUNTY, NEW MEXICO

I - Injection Well
P - Producing Well

ILLEGIBLE

SCHLUMBERGER ELECTRICAL LOGS

COMPANY [illegible]

WELL [illegible]

FIELD: SHUGART AREA

SURVEY [illegible]

COUNTY: EDDY

STATE: NEW MEXICO FILING No.:

PROBLEM: GENERAL STUDY

Elevation:

First Reading	3715	ft.	Started run	11:30	p.m.
Last Reading	[illegible]	ft.	Finished run	5:00	a.m.
Footage Measured	[illegible]	ft.	Time well [illegible]	32	hrs.
Casing Shoe Depth	[illegible]	ft.	Time waiting [illegible]	[illegible]	hrs.
		ft.	Total time incurred by run	[illegible]	hrs.
Bottom Depth	3718	ft.	Mileage incurred by run	50	M.
Total Depth Reached	3715	ft.			

MUD CHARACTERISTICS

Nature: Dry hole/ oil in bottom. Viscosity:

Weight: Resistivity: ____@ °F

Bottom Temperature: °F

Diameter of hole: from Csg. to 2925 8"; from 2925 to T.D. [illegible]; from

REMARKS

THE MARKING AT 3700' PROBABLY INDICATES THE TOP OF THE FLUID IN THE HOLE.

BASE OF SALT 1697'

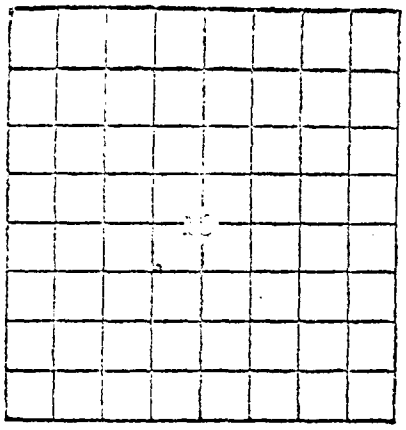
RED SAND 3030'-3094'

THE PRESENCE OF SMALL OIL AND/OR GAS SHOWS ARE INDICATED BY THE TEMPERATURE CURVE IN THE "RED SAND" FROM 3056' to 3070', AND FROM 3342' to 3360', WITH POSSIBLE SHOWS FROM 3260' to 3302', and 3366' TO 3392'.

Date March 23, 1940 Observers: R. W. Rochon

SELF-POTENTIAL LOG-millivolts	INTERPRETATION	DEPTHS 2" INCHES PER 100'	GEOL. LOG.	RESISTIVITY LOG-ohms. m²/m.
		00		
		50		
		100		
		50		
		200		

Form 9-330



LOCATE WELL CORRECTLY

U. S. LAND OFFICE [illegible]

SERIAL NUMBER [illegible]

LEASE OR PERMIT TO PROSPECT Lease applied for.

UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Schoonerhorn-Winton Co. Address 312 Kennedy Bldg., Tulsa, Okla.

Lessor or Tract Ginsberg "B" Tract 4 Field Shuqart State [illegible]

Well No. 1 Sec. 18 T. 18 R. 21 Meridian [illegible] County [illegible]

Location 1980 ft. {N./S.} of S. Line and 1980 ft. {E./W.} of W. Line of Section 18 Elevation [illegible] (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed [illegible]

Date May 24, 1940 Title President

The summary on this page is for the condition of the well at above date.

Commenced drilling Feb. 5, 1940 Finished drilling March 23, 1940

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 3,050 to 3,095 No. 4, from [illegible] to [illegible]

No. 2, from 3,540 to 3,555 No. 5, from [illegible] to [illegible]

No. 3, from [illegible] to [illegible] No. 6, from [illegible] to [illegible]

IMPORTANT WATER SANDS

No. 1, from [illegible] to [illegible] No. 3, from [illegible] to [illegible]

No. 2, from [illegible] to [illegible] No. 4, from [illegible] to [illegible]

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From	Perforated To	Purpose
8-5/8	24	8	Lone Star	700					Surface
5½	14	8	[illegible]	2,998	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4½	9.5	[illegible]	[illegible]	2,676	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	700	50	Halliburton		
5½	2,998	100	Halliburton		

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material [illegible] Length [illegible] Depth set [illegible]

Adapters—Material [illegible] Size [illegible]

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
		S.N.G.	100 qts.	3-25-40	3540-65	
		L.N.G.	170 qts.	4-3-40	3046-75	3,565

TOOLS USED

Rotary tools were used from [illegible] feet to [illegible] feet, and from [illegible] feet to [illegible] feet

Cable tools were used from 0 feet to 3,714 feet, and from [illegible] feet to [illegible] feet

DATES

[illegible], 19[illegible] Put to producing April 23, 1940

The production for the first 24 hours was 45 barrels of fluid of which 100 % was oil; 0 %

[illegible] % water; and 0 % sediment. Gravity, °Bé. [illegible]

No. 3, from .... to .... No. 6, from .... to ....

IMPORTANT WATER SANDS

No. 1, from .... to .... No. 3, from .... to ....

No. 2, from .... to .... No. 4, from .... to ....

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From	Perforated To	Purpose
8-5/8	24	8	L.W.	700					Surface
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
				[illegible]					

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
8-5/8	700	50	Halliburton		
5½	2,978	100	Halliburton		

PLUGS AND ADAPTERS

Heaving plug—Material .... Length .... Depth set ....

Adapters—Material .... Size ....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
		S N G	120 qts	3-25-40	3540-65	
		L N G	130 qts	4-3-40	3046-75	3,565

TOOLS USED

Rotary tools were used from .... feet to .... feet, and from .... feet to .... feet

Cable tools were used from 0 feet to 3,714 feet, and from .... feet to .... feet

DATES

............, 19...... Put to producing April 22, 1940

The production for the first 24 hours was 45 barrels of fluid of which 100 % was oil; 0 % emulsion; 0 % water; and 0 % sediment. Gravity, °Bé. 37

If gas well, cu. ft. per 24 hours .... Gallons gasoline per 1,000 cu. ft. of gas ....

Rock pressure, lbs. per sq. in. .... 2nd 24 hours produced 15 bbls.

EMPLOYEES

T. H. Donnelly, Driller Fred Sandwich, Driller

Phil Walker, Driller ...., Driller

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	50		Red bed
50	90		Red sandy shale.
90	130		Red Bed
130	200		Red Sandy Shale
200	250		Red Shale
250	455		Red Rock
455	605		Anhydrite
605	630		Red Rock
630	665		Anhydrite
665	670		Red Bed
670	~~690~~ 695		Anhydrite
695	700		Red Bed
700	710		Red Rock
710	1,135		Salt
1,135	1,190		Salt & Potash
1,190	1,520		Salt
1,520	1,530		Anhydrite
1,530	1,695		Salt
1,695	1,860		Anhydrite
1,860	1,890		Lime
1,890	2,445		Anhydrite
2,445	2,460		Lime
2,460	2,570		Anhydrite
2,570	3,050		Lime
3,050	3,100		Sand
3,100	3,245		Lime

(OVER)

FORMATION RECORD—Continued

FROM	TO	TOTAL FEET	FORMATION
3,245	3,255		Lime hard.
3,255	3,410		Lime
3,410	3,415		Shale & Anhydrite
3,415	3,460		Lime
3,460	3,470		Sand Dry
3,470	3,485		Sand
3,485	3,500		Lime
3,500	3,515		Sand
3,515	3,714		Lime

ILLEGIBLE

FROM	TO	TOTAL FEET	FORMATION

FORMATION RECORD

EMPLOYEES

DATES

TOOLS USED

SHOOTING RECORD

PACKERS AND BRIDGES

MUDDING AND CEMENTING RECORD

GOVERNMENT PRINTING OFFICE 0—6745

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any of it was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Well drilled to 3,714- plugged back to 3,565

RAY SMITH DRLG. COMPANY
SHUGART-18 QUEEN UNIT
EDDY COUNTY, NEW MEXICO

DIAGRAM OF
UNIT WELL #6

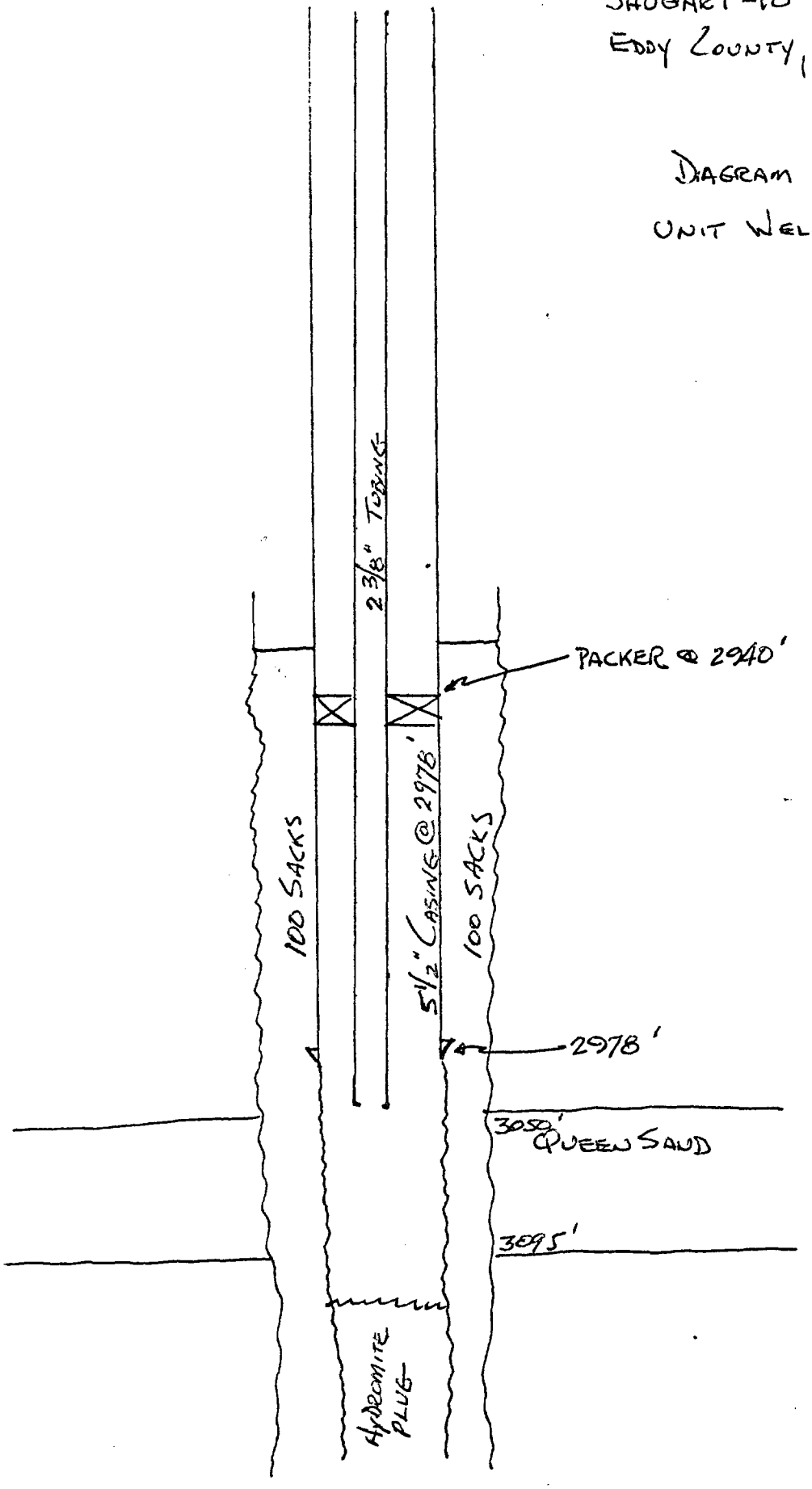


EXHIBIT "C"

SFOCC Jim Kapteina

Xerox Copy to "Santa Fe" 6-21-67. No objection to this application. P. L. Clement

RAY SMITH DRILLING COMPANY
3300 REPUBLIC BANK BUILDING
DALLAS, TEXAS 75201

June 16, 1967

OIL OPERATIONS FOR:
RAY SMITH-OIL PRODUCER
RAY SMITH DRILLING CO.
RAY SMITH TRUST
CHEMICAL EXPRESS, INC.
CEMENT TRANSPORTS, INC.

RECEIVED
JUN 21 1967
O. C. C.
ARTESIA, OFFICE

MAIN OFFICE OCC
'67 JUN 19 AM 8 23

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

Your Order No. R-3112
Shugart 18-Queen Unit
Eddy County, New Mexico

We submit the following information for your consideration, and we request your approval for conversion of Well #6 on subject Unit from a producing status to one of injection.

Rule 701-E

5. Your Order No. R-3112 originally authorized this waterflood project.

Our reason for this converstion is that the well experienced premature water breakthrough and, after extensive testing, it was decided to convert it to injection status. It was producing 100% water.

The well has 5-1/2" casing and had been producing from open-hole. Rods and tubing were pulled, well cleaned out and a cement plug (10' of pea gravel and 13' of hydromite) was placed directly under the producing formation at a depth of 3,229' to facilite injection into the producing zone. Then we re-ran the 2-3/8" tubing on a packer which was set at a depth of 2,940' and well placed on injection service April 1, 1967.

Other pertinent data is shown below in complying with Section B of this regulation.

Rule 701-B

1. Attached is a plat showing the location of subject well and its relationship to the other wells in this Unit. The formation involved is the Queen Sand. See Exhibit "A" attached.

2. See Exhibit "B" attached.

MAIN OFFICE OCC
'67 JUN 22 PM 1 21

3. See Exhibit "C" attached.

4. The Formation is the Queen Sand at a depth of 3,050' to 3,095'; water is the fluid to be injected; anticipated volume is 4,400 bbls per month and average injection pressure is 1,600#; the source of water -- purchased from the Double Eagle Corporation of New Mexico.

June 20, 1967

'67 JUN 21 AM 8 [illegible]

Ray Smith Drilling Company
3300 Republic Bank Building
Dallas, Texas 75201

Gentlemen:

Receipt of a copy of your application to the New Mexico Oil Conservation Commission which seeks authority to convert well #6 in your Shugart 18-Queen Unit, Eddy County, New Mexico to water injection service is gratefully acknowledged.

FEI/mm
cc-Oil Conservation Comm.

Yours truly,

S. E. Reynolds
State Engineer

By:
Frank E. Irby
Chief
Water Rights Div.