SHELL OIL COMPANY

PETROLEUM BUILDING
P.O. BOX 1509
MIDLAND, TEXAS 79702

DHC-264
Due-11/6/78

October 13, 1978

OCT 26 1978

Subject: Application to Downhole Commingle
Shell Taylor-Glenn Well No. 2
Unit Letter I, Located 4620' FSL
and 660' FEL Section 3, T-21-S,
R-37-E, Lea County, New Mexico
Drinkard Field

State of New Mexico (3)
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention Mr. J. D. Ramey, Secretary-Director

Gentlemen:

Shell Oil Company respectfully requests administrative approval under the provisions of Rule 303-C to commingle within the wellbore production from the Drinkard and Tubb Gas pools in our Taylor-Glenn Well No. 2, located in Unit I of Section 3, T-21-S, R-37-E, Lea County, New Mexico.

The subject well is currently producing from the Tubb zone by beam pump at a rate of 6 BOPD + 3 BWPD + 150 MCFGPD. The Drinkard zone has been isolated by a retrievable bridge plug which was set at 6520'. The last test (July 6, 1978) on the Drinkard zone was 2 BOPD + 1 BWPD + 14 MCFGPD. Bottom hole pressure tests run in July, 1978 are as follows:

Tubb Gas	48 Hr. SI	750 PSIG
Drinkard	Static Pressure	768 PSIG

Both zones are in a steady rate of decline.

Shell plans to remove the RBP over the Drinkard zone and produce both zones up 2 3/8" tubing by beam pump. Production should increase to approximately 25 BOPD + 7 BWPD + 400 MCFGPD. Therefore, we will be able to more efficiently and economically produce the remaining reserves in both zones.

Production from the Drinkard and Tubb zones has been surface commingled at the Taylor-Glenn Battery for a number of years without any indication of fluid incompatibility. Since the crudes are commingled at the tank battery before being sold, no difference in value should result by commingling within the wellbore of the subject well.

A copy of this application is being sent to all offset operators. Your further handling and approval of this application will be sincerely appreciated.

Yours very truly,

for W. T. Weller, Jr.
Operations Manager-Midland
Mid-Continent Division

JWH:JAH

Attachments

cc - Offset Operators

- New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, NM 88240

OFFSET OPERATORS

TAYLOR-GLENN NO. 2
LEA COUNTY, NEW MEXICO

CONTINENTAL OIL COMPANY
P. O. BOX 460
HOBBS, NM 88240

M. R. ANTWEIL
P. O. BOX 2010
HOBBS, NM 88240

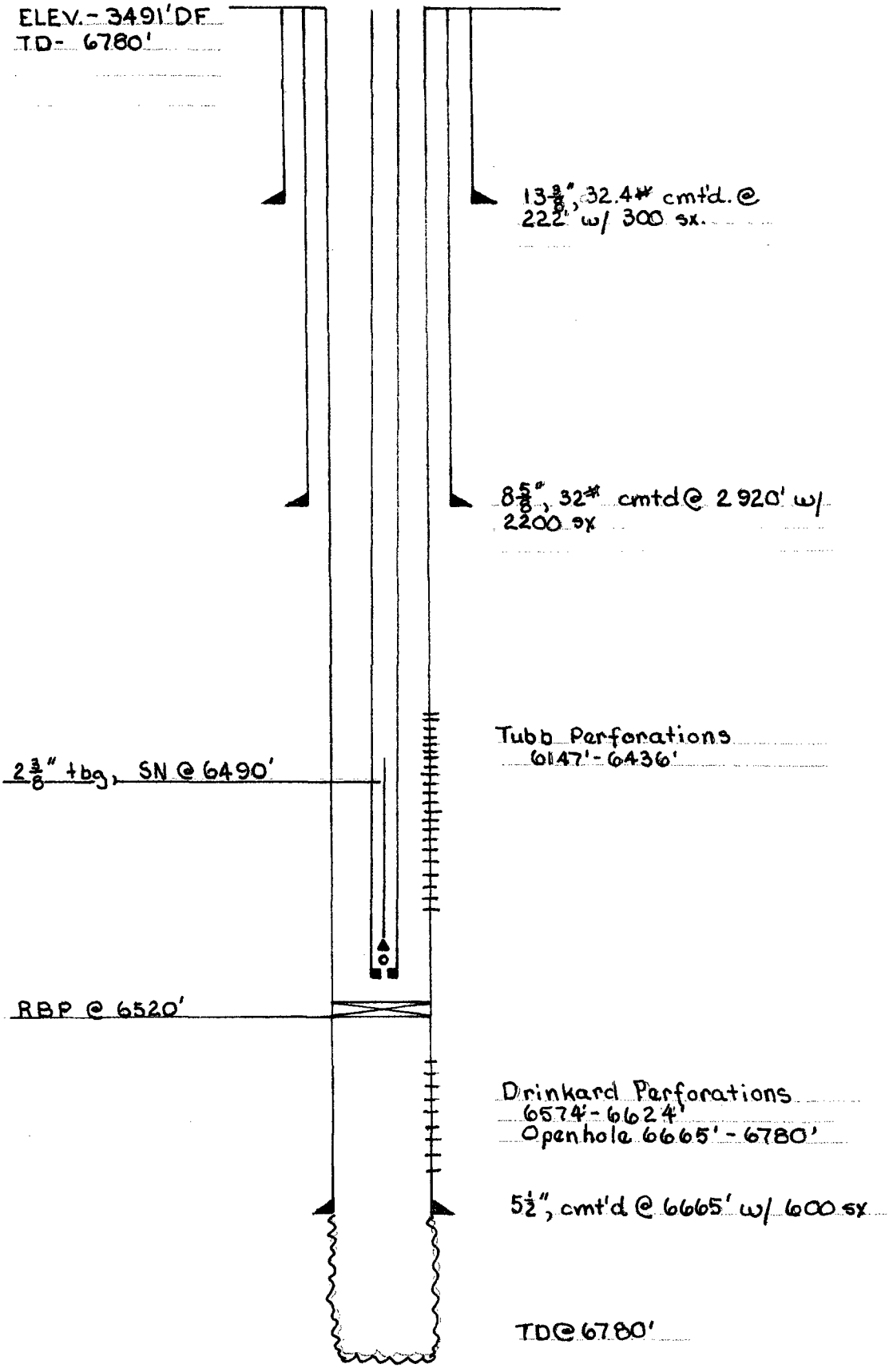
EXXON COMPANY-U.S.A.
P. O. BOX 1600
MIDLAND, TX 79702

AZTEC OIL & GAS CO.
P. O. BOX 337
HOBBS, NM 88240

Tubb - 6 BO 75% 150 mcf 91%
Dr - 2 BO 25% 14 mcf 9%
8 164

Bottom Pf 6624 = 40 BOPD max

SHELL-TAYLOR GLENN WELL NO. 2
DOWNHOLE COMMINGLING APPLICATION
DRINKARD & TUBB POOLS



WR-3198

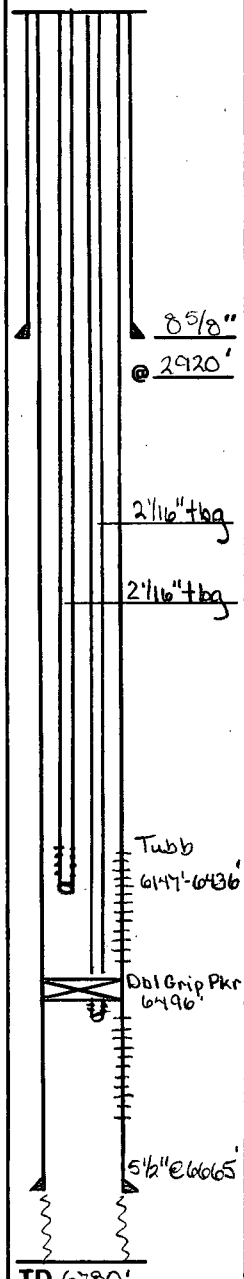
Drinkard Field
Taylor Glenn #2

LOCATION 1620' FSL & 660' FEL **SECTION** 3, T-21-S, R-37-E, (I)

Drinkard (Oil) Producer **COUNTY** Lea Co., New Mexico

DATUM 3491' [DF] **G.L. ELEV.** _____ **TD** 6780' **PBTD** _____ [ ]

Elev 3491' DF



CASING RECORD

SIZE	WT.	DEPTH	CMT.	TOC
13 3/8"	32.4#	222'	300	
8 5/8"	32#	2920'	2200	
5 1/2"	—	6665'	600	

LOGGING RECORD

DATE	CO.	TYPE	INTERVAL

LOG TOPS

ZONE	TOP	SUBSEA
GOC		
OWC		

PERFORATIONS AND/OR OPEN HOLE

DATE	ZONE	DEPTHS	DENS & SIZE
6-26-50	Tubb	6324-72, 6395-6407, 6429-36'	4 JSPF (268 holes)
12-9-64	Drnk	6574, 78, 83, 87, 88, 92, 96, 6601, 03, 07, 09, 13, 14, 15, 21, 24	1-3/8" JSPF (16 holes)
9-6-74	Tubb	6147, 60, 76, 88, 98, 6207, 15, 44, 59, 66, 85, 93, 99	1 JSPF (13 holes)
	Drnk	Open hole 6665'-6780'	
		* NOT OPEN NOW	

SQUEEZE & REPAIR

DATE	DEPTH	WORK DONE

STIMULATION

DATE	ZONE	AMOUNT & TYPE	METHOD	BEFORE	AFTER
3-31-50	Drnk	1000g 20% LST	AT		
7-25-56	"	10,000g Retarded acid			
6-27-58	Tubb	1000g 7 1/2% MCA			
	Tubb	30,000g GLC + 1#/g sand	Frac.		
		.1#/g Adomite			
6-20-61	Drnk	250g 15% FeA			
		750g 15% acid			
4-25-63	Tubb	1500g FeA			
12-10-64	Drnk	1500g 15% NEA			
		10,000g LC + 1/20#/g Adomite + 1/2#/g sand	Frac 6574'-6615'		

OPT

DATA AVAILABLE DST ☐ CORE ☐ PVT ☐ OTHER ☐

REMARKS: Opnd 9-5-74

DATE: 6-20-77

ACB

Drinkard Field

Taylor Glenn #2

LOCATION _____ SECTION _____ _____

_____ COUNTY _____

DATUM _____ [ ] G.L. ELEV. _____ TD _____ PBTD _____ [ ]

_____

_____

_____"

@ _____

_____

TD

CASING RECORD

SIZE	WT.	DEPTH	CMT.	TOC

LOGGING RECORD

DATE	CO.	TYPE	INTERVAL

LOG TOPS

ZONE	TOP	SUBSEA
GOC		
OWC		

PERFORATIONS AND/OR OPEN HOLE

DATE	ZONE	DEPTHS	DENS & SIZE
		* NOT OPEN NOW	

SQUEEZE & REPAIR

DATE	DEPTH	WORK DONE

STIMULATION

DATE	ZONE	AMOUNT & TYPE	METHOD	BEFORE	AFTER
2-25-65	Tubb	500g 15% NEA	Dump acid down tbg		
2-6-67	Tubb	3000g 15% NEA	AT		
10-18-67	Tubb	3000g 15% NEA	AT		
9-7-74	"	1500g 15% NEA	AT 6197'-6299'		
9-8-74	Drnk	32,000g GLC+Mark II	Frac		
		Adomite+ 35,000# sd			
	Tubb	28,000g GLC+ MarkII	Frac		
		Adomite+ 35,000# sd			

OPT

DATA AVAILABLE DST ☐ CORE ☐ PVT ☐ OTHER

REMARKS:

DATE: 6-21-77

ALB

Taylor Glenn #2 Drinkard

F12A

3 - M.O. Reinbach - EB 18110
1 - Cy Jones - Hobbs
1 - D.J. Roach -
ALB

WR-3309
(REV. 2-77/DJR)

SHELL OIL COMPANY
SUBSURFACE PRESSURE SURVEY

Company Shell Oil Company
Lease Taylor Wien Well No. 2
Field Drinkard State New Mexico
Test Date 7-24-78

Producing Formation Tubb
Elevation (CHF, DF, KB, etc.) ( )
Datum _____ subsea, or ( )
Tubing Obstruction at SN @ 6505'
Production Packer at
Perforations 6147-6436'

Instrument Data

Company Running Survey Shell Oil Co.
Element—Range & No. 3500 psi - 5583N
Clock — Range & No. 3hr - 546A
Calibration Date 7-10-78

Static Pressure Data

Test Depth 6450 ft
Pressure at ~~Datum~~ (6450) 754 psig
Shut-in Time 148 hrs
P_i at Datum — psig
Shut-in Tubing Pressure 364 psig
Shut-in Casing Pressure 620 psig
Top of Oil —
Top of Water —
Temperature at _____ feet — °F
Date of Last Test ~~UNKNOWN~~
Pressure @ Datum, Last Test psig
Shut-in Time, Last Test

Flow Test Data

Test Date
Choke Size in
Period of Stabilized Flow hrs
Stabilized Production (q)
Oil bbls/day
Gas MCF/day
Water bbls/day
Flowing Tubing Pressure psig
Flowing Casing Pressure psig
Cumulative Production (Q)
Oil bbls
Gas MCF
Water bbls
Effect. Prod' Life, t=24 Q/q hrs

Remarks:

SURVEYOR D.J. Roach

Depth D	Time	Press., P, psig	ΔP	Static Test ΔD	Static Test Gradient
0	48 hrs	364			
6350	↓	707	343	6350	.054
6450		754	47	100	.47

Time	Press. @ ____ ft	Build-up test Δt hrs	Build-up test $\frac{t}{\Delta t}+1$	Tubing Press.	Casing Press.	Height of Fluid

WR–3309
(REV. 2–77/DJR)

SHELL OIL COMPANY

SUBSURFACE PRESSURE SURVEY

Company Shell Oil Company
Lease Taylor-Glen Well No. 1 2
Field _____ State N.M.
Test Date 7-6-78

Producing Formation DRINKARD
Elevation (CHF, DF, KB, etc.) ( )
Datum _____ subsea, or ( )
Tubing Obstruction at _____
Production Packer at _____
Perforations _____

Instrument Data

Company Running Survey Shell Oil Co.
Element–Range & No. 8362/3600
Clock – Range & No. 1387/3HR
Calibration Date _____

Static Pressure Data

Test Depth	6530'	ft
Pressure at Datum (6530)	768	psig
Shut–in Time	static	hrs
P_j at Datum		psig
Shut–inTubing Pressure	650	psig
Shut–in Casing Pressure	N/K	psig
Top of Oil	N/K	
Top of Water	N/K	
Temperature at ___ feet	N/K	°F
Date of Last Test	none	
Pressure @ Datum, Last Test	/	psig
Shut–in Time, Last Test		

Flow Test Data

not applicable

Test Date		
Choke Size		in
Period of Stabilized Flow		hrs
Stabilized Production (q)		
Oil		bbls/day
Gas		MCF/day
Water		bbls/day
Flowing Tubing Pressure		psig
Flowing Casing Pressure		psig
Cumulative Production (Q)		
Oil		bbls
Gas		MCF
Water		bbls
Effect. Prod' Life, t=24 Q/q		hrs

Remarks:

SURVEYOR M. Sherman

Depth D	Time	Press., P, psig	ΔP	Static Test ΔD	Static Test Gradient
0		650			
6530		768	118	6530	.033

Time	Press. @ 6530 ft	Build–up test Δt hrs	Build–up test $\frac{t}{\Delta t}+1$	Tubing Press.	Casing Press.	Height of Fluid
0	768			650	—	—
1.0	768			650	—	—

NEW MEXICO OIL CONSERVATION COMMISSION

GAS – OIL RATIO TESTS

RECLASSIFY FROM GAS TO OIL

C-116

Revised 1-1-65

Operator	Pool	County
Shell Oil Company	Tubb	Lea

Address	TYPE OF TEST – (X)	Scheduled ☐	Completion ☐	Special ☒
P. O. Box 576 Houston, Texas 77001				

LEASE NAME	WELL NO.	LOCATION U	S	T	R	DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST WATER BBLS.	GRAV. OIL	OIL BBLS.	GAS M.C.F.	GAS – OIL RATIO CU.FT/BBL
Taylor Glenn	2	I	3	21 S	37 E	7-24-78	F	32/64	40		24	3	36.2	9	150	16,667

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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 in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

W. Whitworth for A. Ramirez

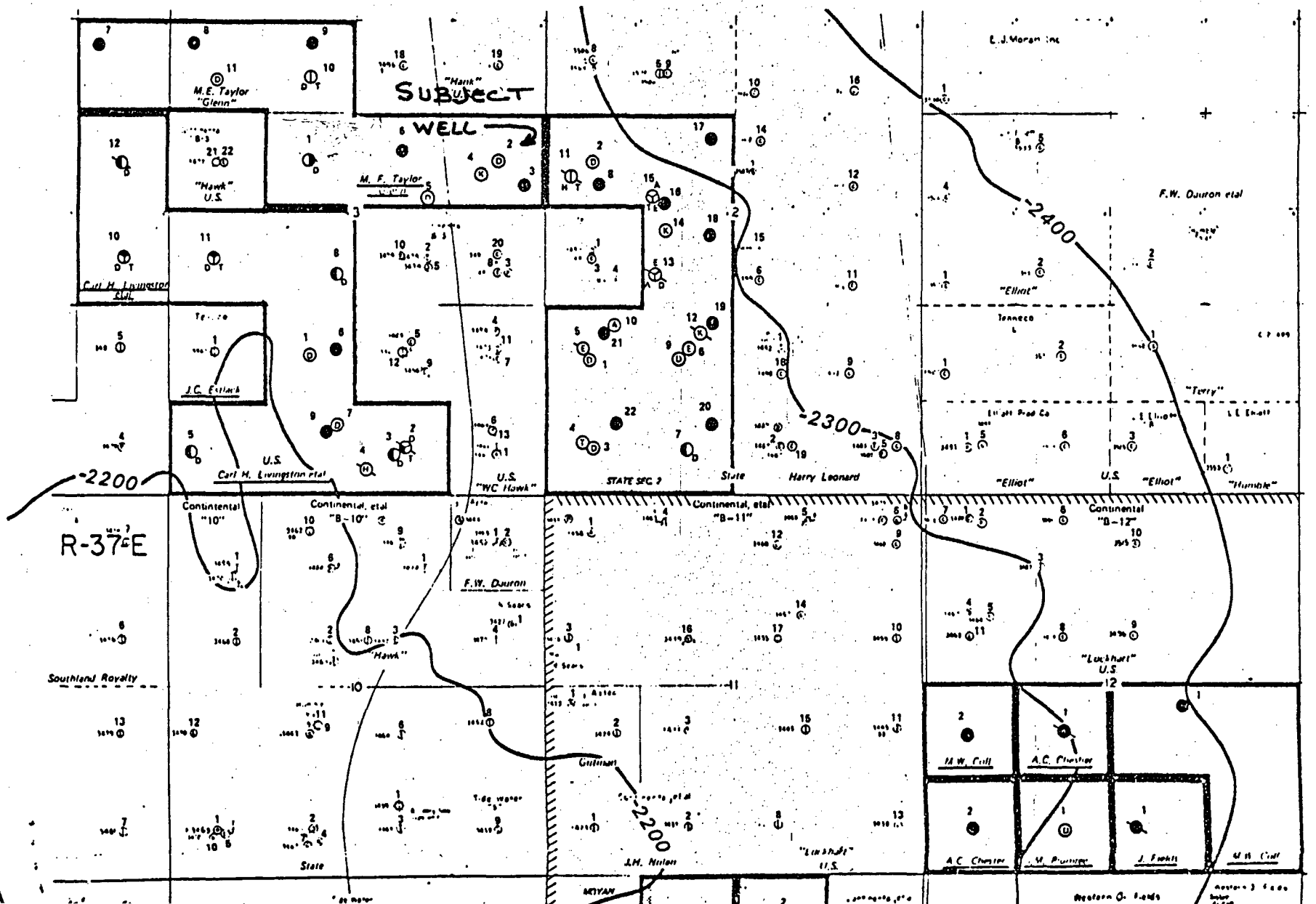
(Signature)

Supv. Oil Acctg.

(Title)

7-25-78

Shell-Taylor Glenn No. 2
Lea County, New Mexico

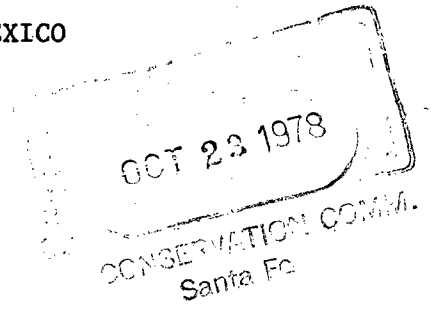


OIL CONSERVATION COMMISSION
Hobbs DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE October 19, 1978

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



Gentlemen:

I have examined the application dated _____

for the Shell Oil Co. Taylor Glenn #2-I 3-21-37
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

O.K.----J.S.

Yours very truly,

Jerry Sexton