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AREA 640 ACRES
LOCATE WELL CORRECTLY

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

WELL RECORD

This well record is to be filed with the Oil Conservation Commission, to which Form C-101 was sent not later than thirty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPPLICATE. If State Land submit 6 Copies

Shell Oil Company
(Company or Operator)Emerald Unit
(Lessee)Well No. 1, in NE $\frac{1}{4}$ of NW 23, T. 16S, R. 32E, NMPM.

Anderson Area Wildcat

Lea

County.

Well is 660 feet from north line and 1280 feet from west line
of Section 23. If State Land the 120 acre lease No. is K-1283Drilling Commenced July 6, 1962. Drilling was Completed September 27, 1962.Name of Drilling Contractor B. L. McFarland, Inc.Address 3612 W. Wall, Midland, TexasElevation above sea level at Top of Tubing Head 4290. The information given is to be kept confidential until
not confidential, 19 .

OIL SANDS OR ZONES

No. 1, from 9660' to 9666' No. 4, from to
No. 2, from to No. 5, from to
No. 3, from to No. 6, from to

WATER SANDS

Include data on rate of water inflow and elevation to water sand zone in hole.

No. 1, from feet.
No. 2, from feet.
No. 3, from feet.
No. 4, from feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	LENGTH	KIND OF GRAP	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
13 3/8"	48#	new	396'				Surface
9 5/8"	40#	new	4263'				Intermediate
4 1/2"	11.6#	new	5508'	DOT Type V		9660' - 9666'	Oil

MUDLOGGING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. BAGS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
17 1/2"	13 3/8"	412'	450	Pump & Plug	Cemented to surface	
12 1/4"	9 5/8"	4277'	4175	Pump & Plug	Cemented to surface	
8 3/4"	4 1/2"	9750'	315	Pump & Plug		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Perforated 9660' - 9666' w/2 JSPP.

Treated w/200 gallons Spearhead Acid.

Result of Production Stimulation On OPT flowed 197 BOPD + 2 BWPD thru 24/64' choke.

FTP 240 = 220 psi.

Depth Cleaned Out 9713'

RECORD OF DRILL-STEM AND SPECIAL TESTS

If drill-stem or other special tests or deviation surveys were made, submit report on separate sheet and attach hereto

TOOLS USED

Rotary tools were used from 0 feet to 13,523' feet, and from feet to feet.
Cable tools were used from feet to feet, and from feet to feet.

PRODUCTION

Put to Producing October 11, 1962
OIL WELL: The production during the first 24 hours was 199 barrels of liquid of which 99% was oil; % was emulsion; 1% water; and % was sediment. A.P.I. Gravity 38.6 deg.
GAS WELL: The production during the first 24 hours was M.C.F. plus barrels of liquid Hydrocarbon. Shut in Pressure lbs.
Length of Time Shut in

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico

Northwestern New Mexico

T. Anhy.		T. Devonian.		T. Ojo Alamo.	
T. Salt.		T. Silurian.	13,504' (-9202')	T. Kirtland-Fruitland.	
B. Salt.		T. Montoya.		T. Farmington.	
T. Yates.	2559' (+1743')	T. Simpson.		T. Pictured Cliffs.	
T. 7 Rivers.	2835' (+1467')	T. McKee.		T. Menefee.	
T. Queen.	3446' (+856')	T. Ellenburger.		T. Point Lookout.	
T. Grayburg.	3854' (+448')	T. Gr. Wash.		T. Mancos.	
T. San Andres.	4218' (+84')	T. Granite.		T. Dakota.	
T. Glorieta.		T. Base Red Beds	1270' (+3032')	T. Morrison.	
T. Drinkard.		T. Yaso	5690' (-1388')	T. Penn.	
T. Tubbs.		T. Atoka	11,474' (-7172')	T.	
T. Abo.	7602' (-3300')	T.		T.	
T. Penn.		T.		T.	
T. Miss.	12,794' (-8492')	T.		T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	420	420	Caliche				
420	1220	800	Red Beds				
1220	2559	1339	Salt & Anhydrite				
2559	4218	1659	Shale, Sand, Limestone				
4218	9056	4838	Dolomite w/sand & Shale				
9056	11474	2418	Limestone w/Shale & Chert				
11474	12794	1320	Shale, Sand, Limestone				
12794	13410	616	Cherty Limestone				
13410	13504	94	Shale				
13504	13523	19	Dolomite				

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

October 15, 1962

Company or Operator Shell Oil Company Address P. O. Box 1858, Roswell, New Mexico
Name R. A. Lowery Original Signed By District Exploitation Engineer
R. A. LOWERY

Shell Oil Company
Emerald Unit # 1
NE/4, NW/4, Sec. 83,
T-16-S, R-35-E, 16a
County, New Mexico

DST # 1: 9642' - 9671' (29' Wolfcamp). Tool open 55 minutes thru 5/8" BC, 1" TC, 4 1/2" DP w/strong blow. GTS 7 minutes at 225 MCF/D, packer failed after 35 minutes total flow. Recovery 65 BM + 25 BC. Gr. 38.5 deg. TOR 760. 60 minutes ISIBHP 3693 psi. FBHP 143 - 355 psi. HMP 4544 - 4527 psi. Recovery mud titrated 300 ppm Cl⁻. Pit mud titrated 1600 ppm total hardness. Inconclusive Test. (Johnston)

DST # 2A: 10,055' - 10,325' (270' Pennsylvanian) Packer failed.

DST # 2: 9989' - 10,325' (336' Pennsylvanian). Tool open 1 hour thru 5/8" BC, 1/4" TC, 4 1/2" DP w/good blow. Recovered 8190' (116 bbls.) sulfur water. 60 minutes ISIBHP 3800 psi. FBHP 1350 - 2425 psi. 55 minutes FSIBHP 3325 psi. HMP 5150 - 5075 psi. Recovery water titrated 12,000 ppm Cl⁻. Pit mud titrated 400 ppm Cl⁻. Conclusive Test. (Foster)

DST # 3: 10,496' - 10,530' (34' Pennsylvanian). Tool open 30 minutes thru 5/8" BC, 1" TC, 4 1/2" DP w/no blow. Recovery 80' (1 bbl.) drilling mud. 60 minutes ISIBHP 104 psi. FBHP 44 - 59 psi. 30 minutes FSIBHP 59 psi. HMP in 5012 psi out 4981 psi. Recovery mud titrated 700 ppm Cl⁻. Pit mud titrated 500 ppm Cl⁻. BHT 168 deg. F. Conclusive Test. (Foster)

DST # 4: 11,866' - 11,933' (67' Atoka). Tool open 1 hour thru 5/8" BC, 1/2" TC, 4 1/2" DP. Opened w/fair blow. NGTS. Recovery 130' (1.8 bbls.) salt water cut drilling mud + 90' (1.3 bbls.) heavily water cut drilling mud + 180' (2.6 bbls.) mud cut salt water + 600' (2.9 bbls.) salt water. bht 166 deg. F. 60 minutes ISIBHP 5929 psi. FBHP 245 - 465 psi. 45 minutes FSIBHP 5603 psi. HMP 5883 - 5836 psi. Recovery water titrated 30,000 ppm Cl⁻. Pit mud titrated 200 ppm Cl⁻. Conclusive Test. (Cook)

DST # 5A: 12,217' - 12,280' (63' Atoka). Packer failed.

DST # 5B: 12,217' - 12,280' (63' Atoka). Hit bridge at 11,940'.

DST # 5C: 12,217' - 12,280' (63' Atoka). Hit bridge at 11,940'.

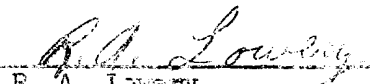
DST # 5D: 12,112' - 12,358' (346' Atoka). Packer failed.

DST # 5E: Tool at 12,280'. Packer seal failure.

DST # 5F: Tool set at 12,281'. Packer seal failure.

DST # 6: 13,128' - 13,181' (53' Mississippian). Tool open 197 minutes thru 5/8" BC, 3/4" TC, 4 1/2" DP. Opened w/good blow and continued throughout test. GTS 5 minutes. Flowed gas at initial rate 490 MCFPD, final rate 70 MCFPD. Recovery 30' slightly gas cut mud + 130' very slightly oil cut and heavily gas cut mud. 60 minutes ISIBHP 6370 psi. FBHP 150 - 120 psi. 30 minutes FSIBHP 3660 psi. HMP 7610 - 7360 psi. Recovery mud titrated 7700 ppm Cl⁻. Pit mud titrated 3100 ppm Cl⁻. Conclusive Test. (HOWDO)

DST # 7: 12,232' - 12,523' (291' Devonian). Tool open 45 minutes thru 5/8" BC, 1/4" TC, 4 1/2" DP w/strong blow. NGTS. Recovered 1950' (28 bbls.) drilling mud + 460' (6.5 bbls.) mud cut salty sulfur water + 8290' (75 bbls.) salty sulfur water w/no show. Recovered salty sulfur water titrated 21,600 ppm Cl⁻. Pit mud titrated 2000 ppm Cl⁻. 45 minutes ISIBHP 5081 psi. FBHP 695 - 3979 psi. 20 minutes FSIBHP 5106 psi. HMP 6883 - 6741 psi. BHT 176 deg. Conclusive Test. (Johnston)


R. A. Lowery
District Exploitation Engineer