BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 5790 Order No. R-5330

APPLICATION OF DOME PETROLEUM CORPORATION FOR POOL CREATION AND ASSIGNMENT OF A DISCOVERY ALLOWABLE, MCKINLEY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 10, 1976, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 30th day of November, 1976, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Dome Petroleum Corporation, has discovered a new common source of supply for the production of oil from the Entrada formation in its Federal 21 Well No. 1, located in Unit K of Section 21, Township 20 North, Range 5 West, NMPM, McKinley County, New Mexico, said well being completed to produce from the Entrada formation August 26, 1976, through casing perforations from 5,877 feet to 5,885 feet.
- (3) That the applicant seeks the creation and designation of a new oil pool for said Federal 21 Well No. 1, and the assignment of an oil discovery allowance to the discovery well.
- (4) That having made a bona fide deepest McKinley County discovery of a new common source of supply, the discovery well, applicant's Federal 21 Well No. 1 is eligible for and should be assigned an oil discovery allowable of ten barrels for each foot of depth from the surface of the ground to the top of the perforations at 5,877 feet, or 58,770 barrels.

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(5) That a new pool for said discovery well should be created and designated the Ojo Encino-Entrada Oil Pool, and the vertical limits of said pool should be the Entrada formation and the horizontal limits should comprise:

TOWNSHIP 20 NORTH, RANGE 5 WEST, NMPM Section 21: SE/4 NW/4 and NE/4 SW/4

(6) That creation of a new pool and the assignment of a discovery allowable, all as described in Findings Nos. (4) and (5) above are in the interest of conservation, will prevent waste, and will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED:

(1) That effective December 1, 1976, a new pool for the production of oil from the Entrada formation in McKinley County, New Mexico, is hereby created and designated as the Ojo Encino-Entrada Oil Pool with vertical limits comprising the Entrada formation and horizontal limits as follows:

TOWNSHIP 20 NORTH, RANGE 5 WEST, NMPM Section 21: SE/4 NW/4 and NE/4 SW/4

- (2) That the discovery well for said pool, the Dome Petroleum Corporation Federal 21 Well No. 1 located in Unit K of Section 21, Township 20 North, Range 5 West, NMPM, McKinley County, New Mexico, is hereby assigned an oil discovery allowable of 58,770 barrels of oil, to be produced within 730 days after the effective date of this order.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

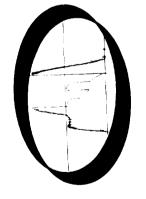
PHIL R. LUCERO, Chajrman

MERY C. ARNOLD, Member

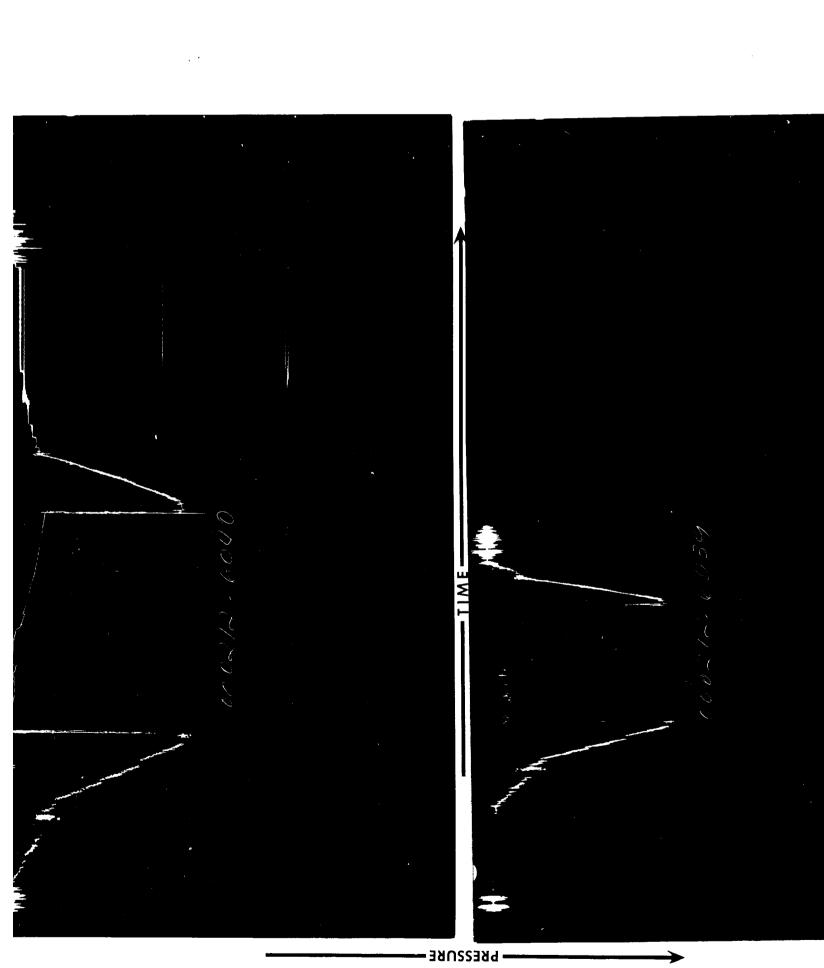
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S E A L

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NOMENCLATURE

b = Approximate Radius of Investigation	Feet
$\mathbf{b}_{\scriptscriptstyle 1}=\mathbf{A}$ pproximate Radius of Investigation (Net Pay Zone h $_{\scriptscriptstyle 1}$) Feet	Feet
D.R.= Damage Ratio	
El = ElevationFeet	Feet
GD $=$ B.T. Gauge Depth (From Surface Reference)Feet	Feet
$\mathbf{h}=$ Interval TestedFeet	Feet
$\mathbf{h}_1=\mathbf{N}$ et Pay ThicknessFeet	Feet
K = Permeabilitymd	· md
$\mathbf{K}_1 = Permeability$ (From Net Pay Zone h.)md	pm .
${f m}={\sf Slope}$ Extrapolated Pressure Plot (Psi 2 /cycle Gas)psi/	. psi/cycle
$OF_1 = Maximum$ Indicated Flow RateMCF	. MCF/D
$OF_2 = Minimum$ Indicated Flow RateMCF	.MCF/D
$OF_3 = Theoretical\ Open\ Flow\ Potential\ with/Damage\ Removed\ Max.$ MCF	MCF/D
$OF_4=Theoretical$ Open Flow Potential with/Damage Removed Min MCF	. MCF/D
${\sf P}_{\sf S}={\sf Extrapolated Static Pressure}$. Psig.
${f P}_{ t} = {\sf Final Flow Pressure}$. Psig.
P $_{ m ot}$ = Potentiometric Surface (Fresh Water ullet)Feet	Feet
Q = Average Adjusted Production Rate During Test	. bbls/day
$\mathbf{Q}_{+} = Theoretical$ Production w/Damage Removed bbls	. bbls/day
Q _g = Measured Gas Production RateMCF	.MCF/D
R = Corrected Recoverybbls	. bbls
r " = Radius of Well Bore Feet	Feet
† = Flow Time	Minutes
† . = Total Flow TimeMin	Minutes
T = Temperature RankineR	&
Z = Compressibility Factor	
μ = Viscosity Gas or LiquidCP	.CP
Log = Commonlog	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

F. .L. Hanterand Ithe Emmitte 1000

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cc. Water			Te	ster D. NO	EFEK	Witness	11111		- 1	- FE
cc. Mud	2250		Dr	illing Intractor LOFFL	AND RROTH	FRS DRILLI	NG COMPA	NY SM	1	FEDERAL Name
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Recovery Mud Filtre	ote@_ 3.5 @	¹F. 	··	rill Collar Lengtl	J.20	599' I.D.	2.25"	k	0-5	€
Mud Pit Sample		•F		rill Pipe Length	`	3245' I.D.	3.340"			Well No.
Mud Pit Sample Fil	W-	'··	 1	acker Depth(s)		3873-38791		Ft.		힌그
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Mud Weight					Surface	Botto	m			1
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C	da		Bottom c	hoke		Surf. temp*F Ticket No. 000212 GOR
Gas arm	vity		Oil gravi	y		GOR
Spec. gr	avity		Chlorides	<u> </u>	рр	m Res
INDICA	TE TYPE A	ND SIZE	OF GAS MEASU	IRING DEVICE U	SED	
Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
10:0	00 PM					On location
12;0	00					Picked up and made up tools
7-27	7-76					
1:00) AM					Hot shot after safety jt.(the one on
						truck broke)
3:3	0					Made up tools
4:0	0					Started in hole
6;5	5					Opened tool with a weak to very weak blow.
7:2	5					Closed tool
8:1	5					Opened tool with very weak blow
8;5	0					Dead
9:1	5					Closed tool
11:	55					Opened bypass
11:	20				ļ	Came off bottom
1:1	5					Out of the hole.
						10' of mud recovered
3:0	00					Left location.
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A		O. D.	I. D.	LENGTH	DEPTH
	Drill Pipe or Tubing	- II	2.25"	71	
	Reversing Sub		2.25		
	Water Cushion Valve	4.11			
	Drill Pipe		3.340"	3245'	
	Drill Collars	6 1/4"	2.25"	599'	
Ц	Handling Sub & Choke Assembly				
	Dual CIP Valve				
Ш	Dual CIP Sampler	5"	.87"	8'	3843'
	Hydro-Spring Tester	5"	.75"	5'	3851'
	Multiple CIP Sampler				
Н	Extension Joint				
H	AP Running Case	5"	3.50"	4'	38561
##	Ar Running Case				
Щ	Hydraulic Jar	5"	1.75"	5'	
	VR Safety Joint	5"	7"	31	
	•	*			
Щ	Pressure Equalizing Crossover				
2.00	Packer Assembly	7½"	1.53"	6'	3873'
	Distributor				
	Packer Assembly	7날"	1.53"	6'	3879'
	Flush Joint Anchor				
	Pressure Equalizing Tube				
-	ressure Equalizing Tube				
Щ	Blanked-Off B.T. Running Case				
R	Drill Collars				
$\overline{\mathbf{v}}$	Anchor Pipe Safety Joint				
	Packer Assembly				
	- action resources				
Щ	Distributor				
	Packer Assembly				
	Anchor Pipe Safety Joint				
	Side Wall Anchor				
	Drill Collars	6 1/4"	2.25"	66'	
	Flush Joint Anchor	5 3/4"	2.50"	30'	
	Blanked-Off B.T. Running Case	5 3/4"	3.50"	4'	3976'
	Total Depth				3979'
		N. II DAAFAIT			